

```

*Multilayer Perceptron Network.
MLP STR_systemic (MLEVEL=0) BY First_D Second_D Third_D WITH D1 D2 D3 D4 D5 D6
D7 D8 D9
/RESCALE COVARIATE=STANDARDIZED
/PARTITION TRAINING=7 TESTING=3 HOLDOUT=0
/ARCHITECTURE AUTOMATIC=YES (MINUNITS=1 MAXUNITS=50)
/CRITERIA TRAINING=BATCH OPTIMIZATION=SCALEDCONJUGATE
LAMBDAINITIAL=0.000005
SIGMAINITIAL=0.00005 INTERVALCENTER=0 INTERVALOFFSET=0.5 MEMSIZE=1000
/PRINT CPS NETWORKINFO SUMMARY CLASSIFICATION SOLUTION IMPORTANCE
/PLOT NETWORK
/STOPPINGRULES ERRORSTEPS= 1 (DATA=AUTO) TRAININGTIMER=ON (MAXTIME=15)
MAXEPOCHS=AUTO
ERRORCHANGE=1.0E-4 ERRORRATIO=0.001
/MISSING USERMISSING=EXCLUDE .

```

Multilayer Perceptron

Notes

Output Created		13-DEC-2020 17:07:59
Comments		
Input	Data	C:\Users\vitart0\OneDrive\Documents\!MyDocs\!Science\Quarantine definition survey\SPSS\NN_EN_covid_nominal_9D.sav
	Active Dataset	DataSet1
	Filter	<none>
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	104
	Missing Value Handling	Definition of Missing
Cases Used		Statistics are based on cases with valid data for all variables used by the procedure.
Weight Handling		not applicable

Syntax

```
MLP STR_systemic
(MLEVEL=0) BY First_D
Second_D Third_D WITH D1
D2 D3 D4 D5 D6 D7 D8 D9
/RESCALE
COVARIATE=STANDARDIZ
ED
/PARTITION
TRAINING=7 TESTING=3
HOLDOUT=0
/ARCHITECTURE
AUTOMATIC=YES
(MINUNITS=1
MAXUNITS=50)
/CRITERIA
TRAINING=BATCH
OPTIMIZATION=SCALED
ONJUGATE
LAMBDAINITIAL=0.0000005
SIGMAINITIAL=0.00005
INTERVALCENTER=0
INTERVALOFFSET=0.5
MEMSIZE=1000
/PRINT CPS
NETWORKINFO SUMMARY
CLASSIFICATION
SOLUTION IMPORTANCE
/PLOT NETWORK
/STOPPINGRULES
ERRORSTEPS= 1
(DATA=AUTO)
TRAININGTIMER=ON
(MAXTIME=15)
MAXEPOCHS=AUTO

ERRORCHANGE=1.0E-4
ERRORRATIO=0.001
/MISSING
USERMISSING=EXCLUDE .
```

Resources	Processor Time	00:00:00.45
	Elapsed Time	00:00:00.49

Warnings

One or more cases in the testing or holdout sample have factor or dependent variable values that do not occur in the training sample.

These cases are excluded from the analysis.

Case Processing Summary

		N	Percent
Sample	Training	11	91.7%
	Testing	1	8.3%
Valid		12	100.0%
Excluded		92	
Total		104	

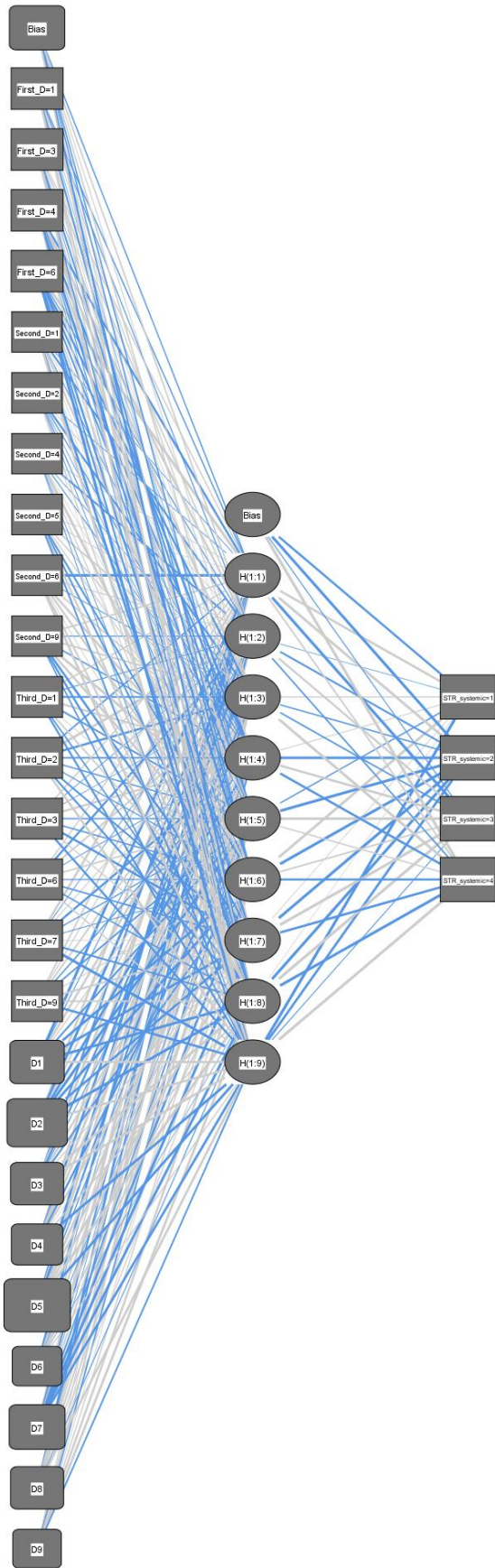
Network Information

Input Layer	Factors		
		1	First discourse in text
		2	Second discourse in text
		3	Third discourse in text
	Covariates	1	CONTACT RESTRICTION
		2	SANITATION AND HYGIENE
		3	ISOLATION OF INFECTED
		4	TOTAL ISOLATION
		5	HEALTH CARE
		6	VIRUS DISSEMINATION
		7	LIFESTYLE CHANGES
		8	RIGHTS AND FREEDOMS INFRINGEMENT

	9	BUREAUCRATIC RESPONSE
	Number of Units ^a	25
	Rescaling Method for Covariates	Standardized
Hidden Layer(s)	Number of Hidden Layers	1
	Number of Units in Hidden Layer 1 ^a	9
	Activation Function	Hyperbolic tangent
Output Layer	Dependent Variables	1
		Systemic strategy
	Number of Units	4
	Activation Function	Softmax
	Error Function	Cross-entropy

a. Excluding the bias unit

— Synaptic Weight > 0
— Synaptic Weight < 0



Hidden layer activation function: Hyperbolic tangent
Output layer activation function: Softmax

Model Summary

Training	Cross Entropy Error	1.030
	Percent Incorrect Predictions	0.0%
	Stopping Rule Used	1 consecutive step(s) with no decrease in error ^a
	Training Time	0:00:00.01
Testing	Cross Entropy Error	.362
	Percent Incorrect Predictions	0.0%

Dependent Variable: Systemic strategy

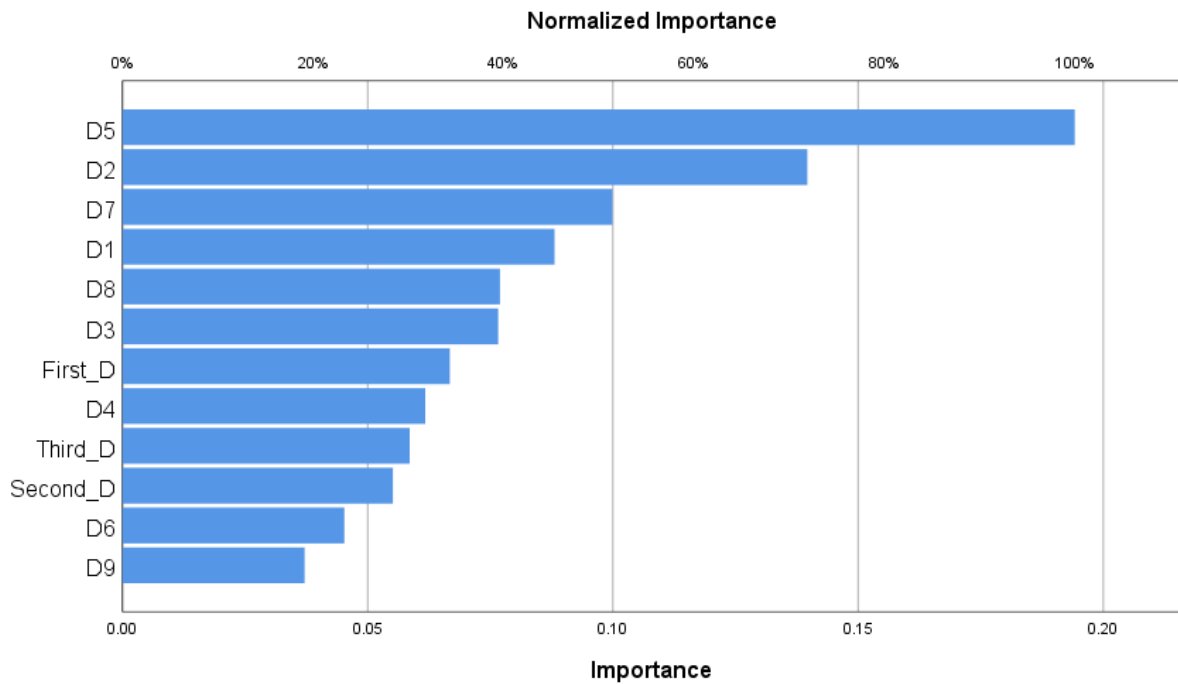
a. Error computations are based on the testing sample.

Parameter Estimates

Predictor	Hidden Layer 1									Output Layer			
	H(1:1)	H(1:2)	H(1:3)	H(1:4)	H(1:5)	H(1:6)	H(1:7)	H(1:8)	H(1:9)	[STR_syste mic=1]	[STR_syste mic=2]	[STR_syste mic=3]	[STR_syste mic=4]
Input Layer													
[Bias]	-.212	.287	.100	.268	-.256	-.235	.113	-.508	.338				
[First_D=1]	-.212	-.138	.157	.077	-.015	-.376	.051	.374	.271				
[First_D=3]	.197	.241	.024	-.006	-.381	-.058	.192	-.273	.756				
[First_D=4]	-.545	.532	.542	-.556	.469	-.736	-.166	-.068	.219				
[First_D=6]	.841	-.146	-.476	-.411	-.336	.227	-.514	-.358	-1.119				
[Second_D=1]	-.077	-.442	.034	-.114	.428	.025	.031	-.673	.652				
[Second_D=2]	-.080	.076	-.463	-.156	-.066	-.125	-.078	.189	.004				
[Second_D=4]	.104	-.413	-.074	-.133	.032	.805	.130	-.085	-.106				
[Second_D=5]	.036	.123	.352	.229	.152	-.384	-.379	.458	-.367				
[Second_D=6]	-.867	.139	-.107	.297	.598	.470	.059	.425	.721				
[Second_D=9]	.319	-.185	.387	-.268	.780	.632	-.600	-.507	-.281				
[Third_D=1]	.289	-.129	-.393	.454	-.354	.056	.327	-.289	-.446				
[Third_D=2]	-.321	.771	-.557	-.318	-.230	-.161	-.437	-.439	.594				

Independent Variable Importance

	Importance	Normalized Importance
First discourse in text	.067	34.4%
Second discourse in text	.055	28.4%
Third discourse in text	.059	30.2%
CONTACT RESTRICTION	.088	45.4%
SANITATION AND HYGIENE	.140	71.9%
ISOLATION OF INFECTED	.077	39.5%
TOTAL ISOLATION	.062	31.8%
HEALTH CARE	.194	100.0%
VIRUS DISSEMINATION	.045	23.3%
LIFESTYLE CHANGES	.100	51.5%
RIGHTS AND FREEDOMS INFRINGEMENT	.077	39.6%
BUREAUCRATIC RESPONSE	.037	19.1%



*Multilayer Perceptron Network.

MLP STR_systemic (MLEVEL=0) BY First_D Second_D Third_D WITH D1 D2 D3 D4 D5 D6 D7 D8 D9

```

/RESCALE COVARIATE=STANDARDIZED
/PARTITION TRAINING=7 TESTING=3 HOLDOUT=0
/ARCHITECTURE AUTOMATIC=YES (MINUNITS=1 MAXUNITS=50)
/CRITERIA TRAINING=BATCH OPTIMIZATION=SCALEDCONJUGATE
LAMBDAINITIAL=0.000005
SIGMAINITIAL=0.00005 INTERVALCENTER=0 INTERVALOFFSET=0.5 MEMSIZE=1000
/PRINT CPS NETWORKINFO SUMMARY CLASSIFICATION SOLUTION IMPORTANCE
/PLOT NETWORK
/STOPPINGRULES ERRORSTEPS= 1 (DATA=AUTO) TRAININGTIMER=ON (MAXTIME=15)
MAXEPOCHS=AUTO
ERRORCHANGE=1.0E-4 ERRORRATIO=0.001
/MISSING USERMISSING=EXCLUDE .

```

Multilayer Perceptron

Notes

Output Created		13-DEC-2020 17:08:05
Comments		
Input	Data	C:\Users\vitart0\OneDrive\Documents\MyDocs\Science\Quarantine definition survey\SPSS\NN_EN_covid_nominal_9D.sav
	Active Dataset	DataSet1
	Filter	<none>
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	104
Missing Value Handling	Definition of Missing	User- and system-missing values are treated as missing.
	Cases Used	Statistics are based on cases with valid data for all variables used by the procedure.
Weight Handling		not applicable

Syntax

```
MLP STR_systemic
(MLEVEL=0) BY First_D
Second_D Third_D WITH D1
D2 D3 D4 D5 D6 D7 D8 D9
/RESCALE
COVARIATE=STANDARDIZ
ED
/PARTITION
TRAINING=7 TESTING=3
HOLDOUT=0
/ARCHITECTURE
AUTOMATIC=YES
(MINUNITS=1
MAXUNITS=50)
/CRITERIA
TRAINING=BATCH
OPTIMIZATION=SCALED
ONJUGATE
LAMBDAINITIAL=0.0000005
SIGMAINITIAL=0.00005
INTERVALCENTER=0
INTERVALOFFSET=0.5
MEMSIZE=1000
/PRINT CPS
NETWORKINFO SUMMARY
CLASSIFICATION
SOLUTION IMPORTANCE
/PLOT NETWORK
/STOPPINGRULES
ERRORSTEPS= 1
(DATA=AUTO)
TRAININGTIMER=ON
(MAXTIME=15)
MAXEPOCHS=AUTO

ERRORCHANGE=1.0E-4
ERRORRATIO=0.001
/MISSING
USERMISSING=EXCLUDE .
```

Resources	Processor Time	00:00:00.44
	Elapsed Time	00:00:00.45

Warnings

One or more cases in the testing or holdout sample have factor or dependent variable values that do not occur in the training sample.

These cases are excluded from the analysis.

Case Processing Summary

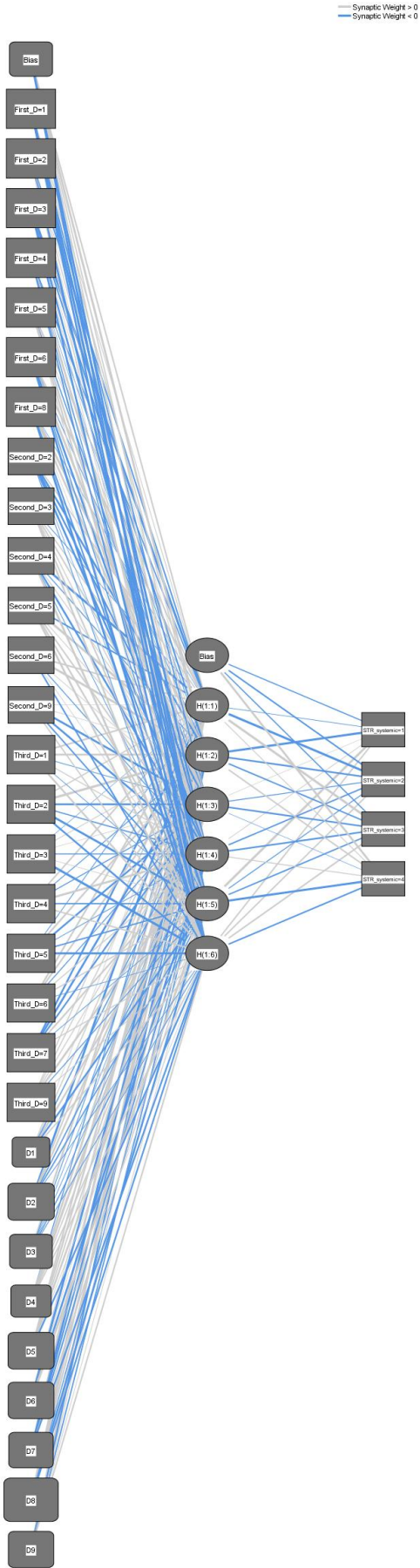
		N	Percent
Sample	Training	12	85.7%
	Testing	2	14.3%
Valid		14	100.0%
Excluded		90	
Total		104	

Network Information

Input Layer	Factors		
		1	First discourse in text
		2	Second discourse in text
		3	Third discourse in text
	Covariates	1	CONTACT RESTRICTION
		2	SANITATION AND HYGIENE
		3	ISOLATION OF INFECTED
		4	TOTAL ISOLATION
		5	HEALTH CARE
		6	VIRUS DISSEMINATION
		7	LIFESTYLE CHANGES
		8	RIGHTS AND FREEDOMS INFRINGEMENT

	9	BUREAUCRATIC RESPONSE
	Number of Units ^a	30
	Rescaling Method for Covariates	Standardized
Hidden Layer(s)	Number of Hidden Layers	1
	Number of Units in Hidden Layer 1 ^a	6
	Activation Function	Hyperbolic tangent
Output Layer	Dependent Variables	1
		Systemic strategy
	Number of Units	4
	Activation Function	Softmax
	Error Function	Cross-entropy

a. Excluding the bias unit



Hidden layer activation function: Hyperbolic tangent
 Output layer activation function: Softmax

Model Summary

Training	Cross Entropy Error	9.089
	Percent Incorrect Predictions	33.3%
	Stopping Rule Used	1 consecutive step(s) with no decrease in error ^a
	Training Time	0:00:00.03
Testing	Cross Entropy Error	.930
	Percent Incorrect Predictions	0.0%

Dependent Variable: Systemic strategy

a. Error computations are based on the testing sample.

Parameter Estimates

Predictor	Hidden Layer 1						Output Layer			
	H(1:1)	H(1:2)	H(1:3)	H(1:4)	H(1:5)	H(1:6)	[STR_system ic=1]	[STR_system ic=2]	[STR_system ic=3]	[STR_system c=4]
Input Layer										
(Bias)	.342	.760	.234	.238	-.627	-.673				
[First_D=1]	.095	.229	-.255	-.749	-1.007	-.531				
[First_D=2]	-.277	.019	.153	.019	-.830	.116				
[First_D=3]	-.911	-.371	.024	-.525	.053	-.529				
[First_D=4]	-.226	-.087	-.003	.634	-.174	-.281				
[First_D=5]	.259	.073	-.214	.482	.433	.127				
[First_D=6]	.515	-.095	.751	-.597	-.180	-.644				
[First_D=8]	-.016	.909	.510	.012	-.326	-.863				
[Second_D=2]	.212	-.520	-.462	-.565	-.014	-.112				
[Second_D=3]	-.057	.200	.301	.152	.346	.476				
[Second_D=4]	-.825	-.145	.106	-.512	-.063	.674				
[Second_D=5]	-.327	.901	.095	.335	.432	.597				
[Second_D=6]	.381	.765	.063	-.123	.037	-.335				
[Second_D=9]	.008	.026	-.601	-.551	-.274	.251				
[Third_D=1]	.397	.566	-.089	.169	-.055	.490				
[Third_D=2]	.224	1.152	-.504	-.219	-.701	-.497				
[Third_D=3]	-.012	.097	.025	-.162	.035	-.927				
[Third_D=4]	.346	-.116	-.155	.649	-.265	.295				
[Third_D=5]	-.079	.459	-.482	-.076	-.260	-.615				

[Third_D=6]	.444	.396	-.124	.183	.228	-.032				
[Third_D=7]	-.492	-.579	-.389	.432	-.061	.192				
[Third_D=9]	.196	.194	.126	.582	-.122	.115				
D1	.033	.196	-.208	.467	-.467	.253				
D2	-.718	.322	.463	-.225	-.231	-.066				
D3	.503	-.104	-.031	-.055	-.196	-.098				
D4	-.186	.569	.912	.208	.235	.232				
D5	.438	.489	.264	.551	.033	-.420				
D6	.098	-.758	.022	-.530	.809	.008				
D7	.577	-.798	-.427	-.269	.209	-.409				
D8	.711	.505	.408	-.172	-.549	-.372				
D9	.762	-.444	.115	-.245	.053	.323				
Hidden Layer 1 (Bias)							-.208	-.344	-.219	.628
H(1:1)							-.049	-.894	1.171	.117
H(1:2)							-.762	-.425	-.273	.298
H(1:3)							.013	-.122	-.385	-.003
H(1:4)							.075	-.265	-.386	.148
H(1:5)							.909	-.140	-.271	-.693
H(1:6)							.279	.291	.368	-.341

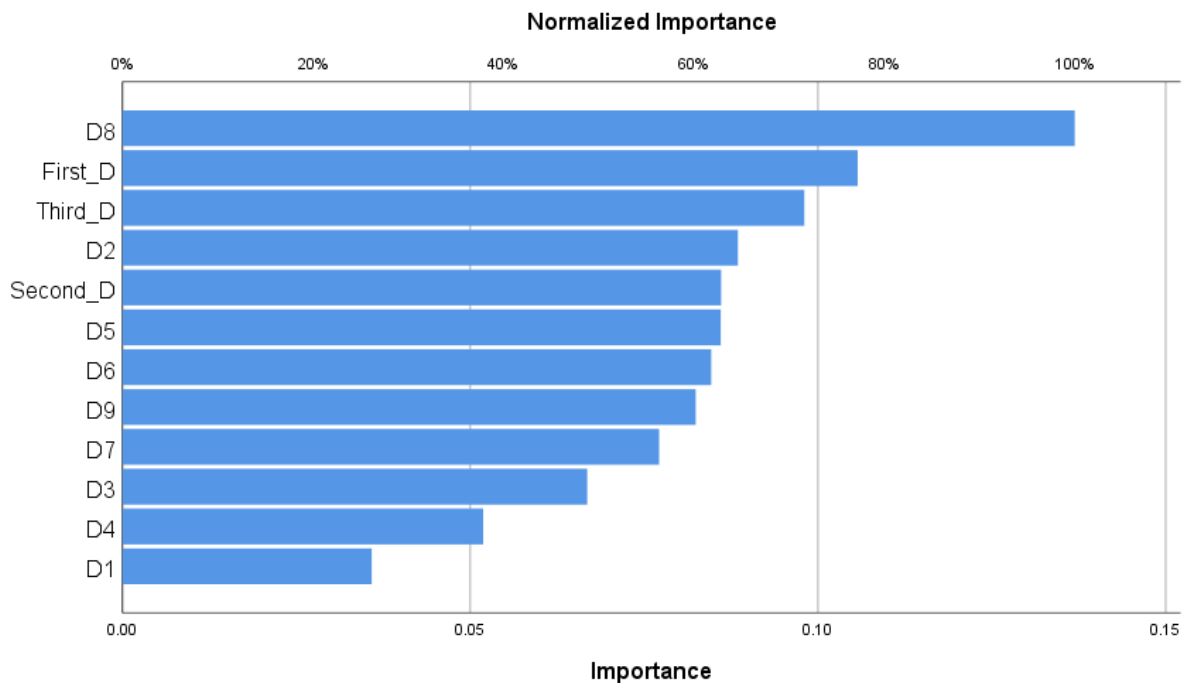
Classification

Sample	Observed	worst option	Predicted			Percent Correct
			mediocre option	good option	best option	
Training	worst option	1	0	0	0	100.0%
	mediocre option	0	0	0	2	0.0%
	good option	0	0	1	2	33.3%
	best option	0	0	0	6	100.0%
	Overall Percent	8.3%	0.0%	8.3%	83.3%	66.7%
Testing	worst option	0	0	0	0	0.0%
	mediocre option	0	0	0	0	0.0%
	good option	0	0	0	0	0.0%
	best option	0	0	0	2	100.0%
	Overall Percent	0.0%	0.0%	0.0%	100.0%	100.0%

Dependent Variable: Systemic strategy

Independent Variable Importance

	Importance	Normalized Importance
First discourse in text	.106	77.2%
Second discourse in text	.086	62.9%
Third discourse in text	.098	71.6%
CONTACT RESTRICTION	.036	26.2%
SANITATION AND HYGIENE	.088	64.6%
ISOLATION OF INFECTED	.067	48.8%
TOTAL ISOLATION	.052	37.9%
HEALTH CARE	.086	62.8%
VIRUS DISSEMINATION	.085	61.8%
LIFESTYLE CHANGES	.077	56.3%
RIGHTS AND FREEDOMS INFRINGEMENT	.137	100.0%
BUREAUCRATIC RESPONSE	.082	60.2%



*Multilayer Perceptron Network.

MLP STR_systemic (MLEVEL=0) BY First_D Second_D Third_D WITH D1 D2 D3 D4 D5 D6 D7 D8 D9

```

/RESCALE COVARIATE=STANDARDIZED
/PARTITION TRAINING=7 TESTING=3 HOLDOUT=0
/ARCHITECTURE AUTOMATIC=YES (MINUNITS=1 MAXUNITS=50)
/CRITERIA TRAINING=BATCH OPTIMIZATION=SCALEDCONJUGATE
LAMBDAINITIAL=0.0000005

```

```

    SIGMAINITIAL=0.00005 INTERVALCENTER=0 INTERVALOFFSET=0.5 MEMSIZE=1000
/PRINT CPS NETWORKINFO SUMMARY CLASSIFICATION SOLUTION IMPORTANCE
/PLOT NETWORK
/STOPPINGRULES ERRORSTEPS= 1 (DATA=AUTO) TRAININGTIMER=ON (MAXTIME=15)
MAXEPOCHS=AUTO
    ERRORCHANGE=1.0E-4 ERRORRATIO=0.001
/MISSING USERMISSING=EXCLUDE .

```

Multilayer Perceptron

Notes

Output Created		13-DEC-2020 17:08:10
Comments		
Input	Data	C:\Users\vitart0\OneDrive\Documents\!MyDocs\!Science\Quarantine definition survey\SPSS\NN_EN_covid_nominal_9D.sav
	Active Dataset	DataSet1
	Filter	<none>
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	104
Missing Value Handling	Definition of Missing	User- and system-missing values are treated as missing.
	Cases Used	Statistics are based on cases with valid data for all variables used by the procedure.
Weight Handling		not applicable

Syntax

```
MLP STR_systemic
(MLEVEL=0) BY First_D
Second_D Third_D WITH D1
D2 D3 D4 D5 D6 D7 D8 D9
/RESCALE
COVARIATE=STANDARDIZ
ED
/PARTITION
TRAINING=7 TESTING=3
HOLDOUT=0
/ARCHITECTURE
AUTOMATIC=YES
(MINUNITS=1
MAXUNITS=50)
/CRITERIA
TRAINING=BATCH
OPTIMIZATION=SCALED
ONJUGATE
LAMBDAINITIAL=0.0000005
SIGMAINITIAL=0.00005
INTERVALCENTER=0
INTERVALOFFSET=0.5
MEMSIZE=1000
/PRINT CPS
NETWORKINFO SUMMARY
CLASSIFICATION
SOLUTION IMPORTANCE
/PLOT NETWORK
/STOPPINGRULES
ERRORSTEPS= 1
(DATA=AUTO)
TRAININGTIMER=ON
(MAXTIME=15)
MAXEPOCHS=AUTO

ERRORCHANGE=1.0E-4
ERRORRATIO=0.001
/MISSING
USERMISSING=EXCLUDE .
```

Resources	Processor Time	00:00:00.42
	Elapsed Time	00:00:00.50

Warnings

One or more cases in the testing or holdout sample have factor or dependent variable values that do not occur in the training sample.

These cases are excluded from the analysis.

Case Processing Summary

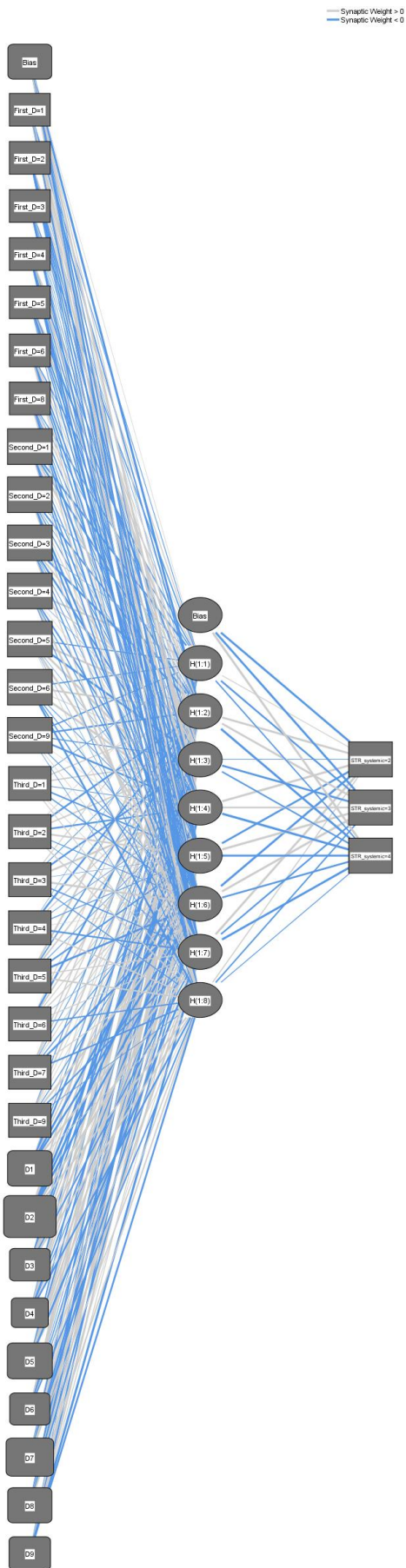
		N	Percent
Sample	Training	13	92.9%
	Testing	1	7.1%
Valid		14	100.0%
Excluded		90	
Total		104	

Network Information

Input Layer	Factors		
		1	First discourse in text
		2	Second discourse in text
		3	Third discourse in text
	Covariates	1	CONTACT RESTRICTION
		2	SANITATION AND HYGIENE
		3	ISOLATION OF INFECTED
		4	TOTAL ISOLATION
		5	HEALTH CARE
		6	VIRUS DISSEMINATION
		7	LIFESTYLE CHANGES
		8	RIGHTS AND FREEDOMS INFRINGEMENT

	9	BUREAUCRATIC RESPONSE
	Number of Units ^a	31
	Rescaling Method for Covariates	Standardized
Hidden Layer(s)	Number of Hidden Layers	1
	Number of Units in Hidden Layer 1 ^a	8
	Activation Function	Hyperbolic tangent
Output Layer	Dependent Variables	1
		Systemic strategy
	Number of Units	3
	Activation Function	Softmax
	Error Function	Cross-entropy

a. Excluding the bias unit



Hidden layer activation function: Hyperbolic tangent
 Output layer activation function: Softmax

[Second_D=6]	- .423	.872	.132	1.690	-.139	-.260	-.402	-.982			
[Second_D=9]	-.456	-.729	-.327	-.809	.023	-.170	.057	-.068			
[Third_D=1]	-.122	.388	.429	-.133	-.546	-.403	.056	.270			
[Third_D=2]	.073	-.819	.496	-.710	.790	-.238	-.074	.409			
[Third_D=3]	.271	-.153	-.794	1.298	-.017	1.234	-.390	-.309			
[Third_D=4]	-.014	-.902	.393	-.103	-.256	.008	-.701	.532			
[Third_D=5]	.993	-.407	.626	-.137	-.643	-1.186	.370	.656			
[Third_D=6]	.178	-.901	.596	.249	.354	-.009	.232	-.450			
[Third_D=7]	.412	.374	-.165	.178	-.295	-.966	.312	-.650			
[Third_D=9]	-.254	.602	.101	.078	-.244	.973	-.574	-.114			
D1	.141	-.311	-.759	.598	-1.592	-1.057	1.368	.132			
D2	.801	.100	.704	-3.126	-2.114	-1.475	1.790	.684			
D3	-.121	-.744	-.573	.522	.902	.662	-.581	.688			
D4	-.642	.558	.981	.472	-.492	-.246	.214	-.756			
D5	-.416	.023	-.683	1.573	.850	.841	-1.287	.059			
D6	.342	1.300	.580	-.085	-.357	-.136	.350	-.493			
D7	.149	-.653	.324	.748	-.906	-.849	1.734	.388			
D8	-.306	-1.909	.650	-1.482	.777	-.680	.093	.482			
D9	-.121	.326	.523	-.741	1.177	.232	-1.856	-.813			
Hidden Layer 1	(Bias)								-1.821	-1.838	4.138
	H(1:1)								.209	-.799	-.468
	H(1:2)								1.492	1.441	-2.860
	H(1:3)								-.057	-1.115	-.623
	H(1:4)								2.230	.769	-3.402
	H(1:5)								-1.089	2.818	-1.126
	H(1:6)								-1.882	2.836	-.806
	H(1:7)								2.699	-.665	-1.844
	H(1:8)								.361	-.551	-.232

Classification

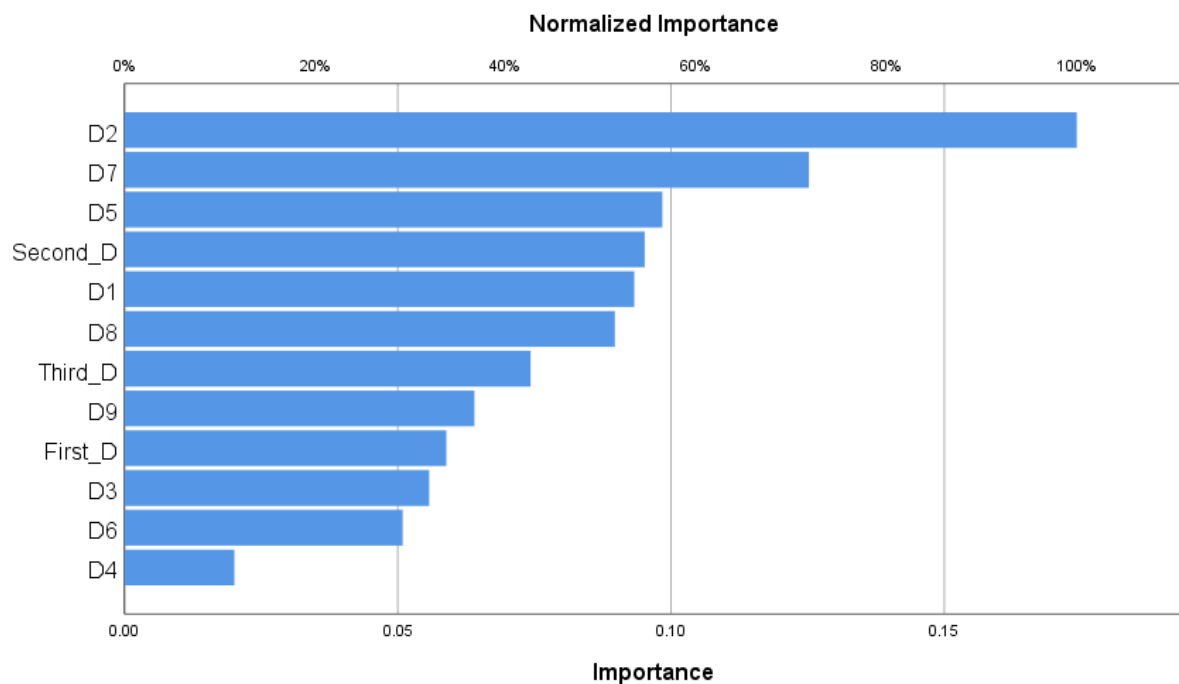
Sample	Observed	Predicted			Percent Correct
		mediocre option	good option	best option	
Training	mediocre option	2	0	0	100.0%
	good option	0	2	0	100.0%
	best option	2	1	6	66.7%
	Overall Percent	30.8%	23.1%	46.2%	76.9%
Testing	mediocre option	0	0	0	0.0%

good option	0	1	0	100.0%
best option	0	0	0	0.0%
Overall Percent	0.0%	100.0%	0.0%	100.0%

Dependent Variable: Systemic strategy

Independent Variable Importance

	Importance	Normalized Importance
First discourse in text	.059	33.8%
Second discourse in text	.095	54.6%
Third discourse in text	.074	42.6%
CONTACT RESTRICTION	.093	53.5%
SANITATION AND HYGIENE	.174	100.0%
ISOLATION OF INFECTED	.056	32.0%
TOTAL ISOLATION	.020	11.5%
HEALTH CARE	.098	56.5%
VIRUS DISSEMINATION	.051	29.2%
LIFESTYLE CHANGES	.125	71.9%
RIGHTS AND FREEDOMS INFRINGEMENT	.090	51.5%
BUREAUCRATIC RESPONSE	.064	36.7%



```

*Multilayer Perceptron Network.
MLP STR_systemic (MLEVEL=0) BY First_D Second_D Third_D WITH D1 D2 D3 D4 D5 D6
D7 D8 D9
/RESCALE COVARIATE=STANDARDIZED
/PARTITION TRAINING=7 TESTING=3 HOLDOUT=0
/ARCHITECTURE AUTOMATIC=YES (MINUNITS=1 MAXUNITS=50)
/CRITERIA TRAINING=BATCH OPTIMIZATION=SCALEDCONJUGATE
LAMBDAINITIAL=0.0000005
SIGMAINITIAL=0.00005 INTERVALCENTER=0 INTERVALOFFSET=0.5 MEMSIZE=1000
/PRINT CPS NETWORKINFO SUMMARY CLASSIFICATION SOLUTION IMPORTANCE
/PLOT NETWORK
/STOPPINGRULES ERRORSTEPS= 1 (DATA=AUTO) TRAININGTIMER=ON (MAXTIME=15)
MAXEPOCHS=AUTO
ERRORCHANGE=1.0E-4 ERRORRATIO=0.001
/MISSING USERMISSING=EXCLUDE .

```

Multilayer Perceptron

Notes

Output Created		13-DEC-2020 17:08:20
Comments		
Input	Data	C:\Users\vitart0\OneDrive\Documents\!MyDocs\!Science\Quarantine definition survey\SPSS\NN_EN_covid_nominal_9D.sav
	Active Dataset	DataSet1
	Filter	<none>
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	104
Missing Value Handling	Definition of Missing	User- and system-missing values are treated as missing.
	Cases Used	Statistics are based on cases with valid data for all variables used by the procedure.

Weight Handling	not applicable	
Syntax	<pre> MLP STR_systemic (MLEVEL=0) BY First_D Second_D Third_D WITH D1 D2 D3 D4 D5 D6 D7 D8 D9 /RESCALE COVARIATE=STANDARDIZ ED /PARTITION TRAINING=7 TESTING=3 HOLDOUT=0 /ARCHITECTURE AUTOMATIC=YES (MINUNITS=1 MAXUNITS=50) /CRITERIA TRAINING=BATCH OPTIMIZATION=SCALED ONJUGATE LAMBDAINITIAL=0.000005 SIGMAINITIAL=0.00005 INTERVALCENTER=0 INTERVALOFFSET=0.5 MEMSIZE=1000 /PRINT CPS NETWORKINFO SUMMARY CLASSIFICATION SOLUTION IMPORTANCE /PLOT NETWORK /STOPPINGRULES ERRORSTEPS= 1 (DATA=AUTO) TRAININGTIMER=ON (MAXTIME=15) MAXEPOCHS=AUTO ERRORCHANGE=1.0E-4 ERRORRATIO=0.001 /MISSING USERMISSING=EXCLUDE . </pre>	
Resources	Processor Time	00:00:00.44
	Elapsed Time	00:00:00.49

Warnings

One or more cases in the testing or holdout sample have factor or dependent variable values that do not occur in the training sample.

These cases are excluded from the analysis.

Case Processing Summary

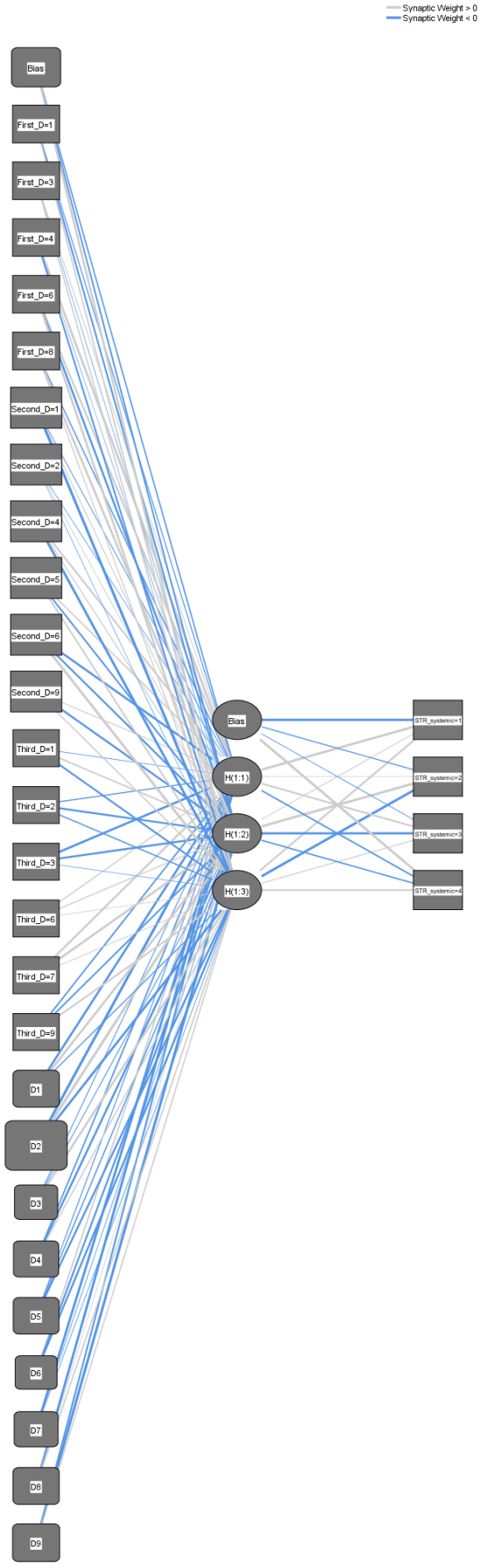
		N	Percent
Sample	Training	12	92.3%
	Testing	1	7.7%
Valid		13	100.0%
Excluded		91	
Total		104	

Network Information

Input Layer	Factors		
		1	First discourse in text
		2	Second discourse in text
		3	Third discourse in text
	Covariates	1	CONTACT RESTRICTION
		2	SANITATION AND HYGIENE
		3	ISOLATION OF INFECTED
		4	TOTAL ISOLATION
		5	HEALTH CARE
		6	VIRUS DISSEMINATION
		7	LIFESTYLE CHANGES
		8	RIGHTS AND FREEDOMS INFRINGEMENT

	9	BUREAUCRATIC RESPONSE
	Number of Units ^a	26
	Rescaling Method for Covariates	Standardized
Hidden Layer(s)	Number of Hidden Layers	1
	Number of Units in Hidden Layer 1 ^a	3
	Activation Function	Hyperbolic tangent
Output Layer	Dependent Variables	1
		Systemic strategy
	Number of Units	4
	Activation Function	Softmax
	Error Function	Cross-entropy

a. Excluding the bias unit



Hidden layer activation function: Hyperbolic tangent
 Output layer activation function: Softmax

Model Summary

Training	Cross Entropy Error	8.675
	Percent Incorrect Predictions	25.0%
	Stopping Rule Used	1 consecutive step(s) with no decrease in error ^a
	Training Time	0:00:00.04
Testing	Cross Entropy Error	.214
	Percent Incorrect Predictions	0.0%

Dependent Variable: Systemic strategy

a. Error computations are based on the testing sample.

Parameter Estimates

Predictor	Hidden Layer 1			Predicted			
	H(1:1)	H(1:2)	H(1:3)	[STR_system ic=1]	[STR_system ic=2]	[STR_system ic=3]	[STR_system ic=4]
Input Layer (Bias)	-.322	-.402	.593				
[First_D=1]	-.237	-.451	.360				
[First_D=3]	.098	-.038	.322				
[First_D=4]	.750	-.003	-.422				
[First_D=6]	.559	-.591	.669				
[First_D=8]	-.306	.654	.265				
[Second_D=1]	-.116	.157	-1.474				
]							
[Second_D=2]	-.063	.075	-.036				
]							
[Second_D=4]	.462	.183	-.959				
]							
[Second_D=5]	.338	-.422	.408				
]							
[Second_D=6]	-.616	-.540	1.110				
]							
[Second_D=9]	.168	-.578	.317				
]							
[Third_D=1]	-.066	.391	-.491				

	[Third_D=2]	-0.297	-0.557	-0.319				
	[Third_D=3]	-0.714	-0.589	-0.037				
	[Third_D=6]	0.297	0.267	0.062				
	[Third_D=7]	0.592	0.735	0.081				
	[Third_D=9]	-0.389	-0.416	0.454				
	D1	-0.694	0.717	-0.290				
	D2	-1.427	1.258	-0.798				
	D3	-0.131	-0.124	0.649				
	D4	-0.349	-0.592	0.300				
	D5	-0.175	-0.304	-0.573				
	D6	0.371	-0.474	-0.576				
	D7	-0.884	-0.067	-0.071				
	D8	-0.962	0.038	0.330				
	D9	-0.430	-1.245	0.308				
Hidden Layer	(Bias)				-0.923	-0.285	-0.082	0.977
1	H(1:1)				0.956	0.014	0.455	-0.398
	H(1:2)				0.119	1.057	-0.873	-0.330
	H(1:3)				0.529	-1.033	0.176	0.404

Classification

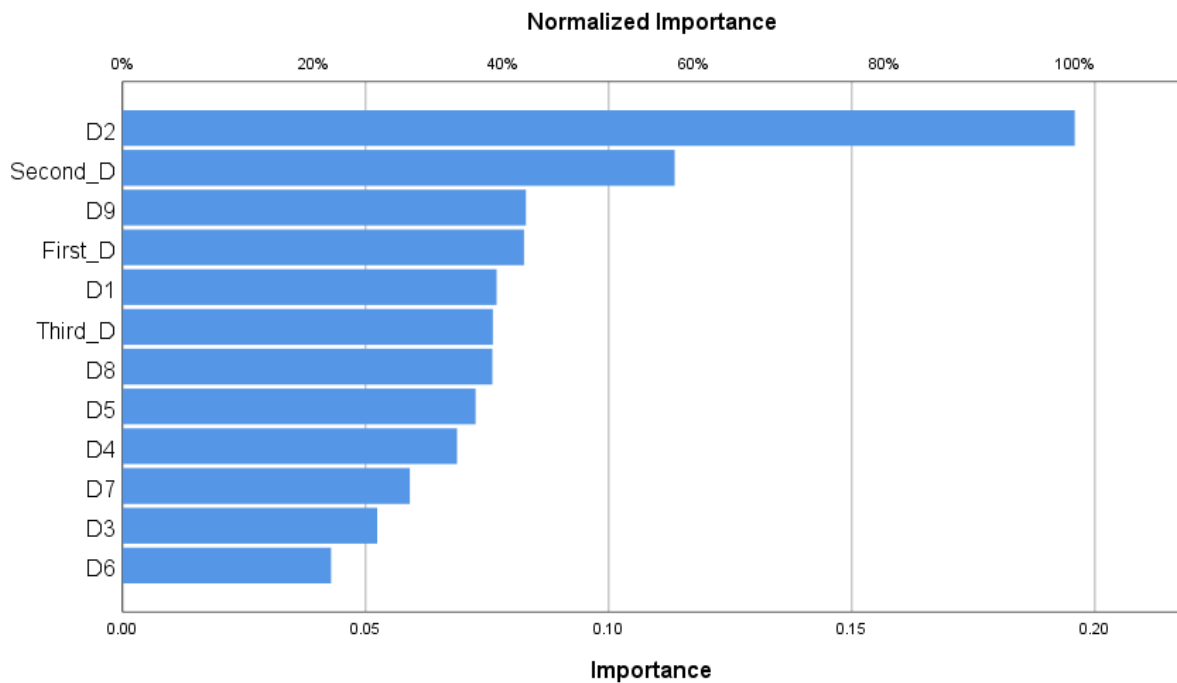
Sample	Observed	Predicted				Percent Correct
		worst option	mediocre option	good option	best option	
Training	worst option	0	0	1	0	0.0%
	mediocre option	0	2	0	0	100.0%
	good option	0	0	2	1	66.7%
	best option	0	0	1	5	83.3%
	Overall Percent	0.0%	16.7%	33.3%	50.0%	75.0%
Testing	worst option	0	0	0	0	0.0%
	mediocre option	0	0	0	0	0.0%
	good option	0	0	0	0	0.0%
	best option	0	0	0	1	100.0%
	Overall Percent	0.0%	0.0%	0.0%	100.0%	100.0%

Dependent Variable: Systemic strategy

Independent Variable Importance

Importance	Normalized Importance
------------	-----------------------

First discourse in text	.083	42.2%
Second discourse in text	.114	58.0%
Third discourse in text	.076	38.9%
CONTACT RESTRICTION	.077	39.3%
SANITATION AND HYGIENE	.196	100.0%
ISOLATION OF INFECTED	.052	26.7%
TOTAL ISOLATION	.069	35.1%
HEALTH CARE	.073	37.1%
VIRUS DISSEMINATION	.043	21.9%
LIFESTYLE CHANGES	.059	30.2%
RIGHTS AND FREEDOMS INFRINGEMENT	.076	38.8%
BUREAUCRATIC RESPONSE	.083	42.4%



```

*Multilayer Perceptron Network.
MLP STR_systemic (MLEVEL=0) BY First_D Second_D Third_D WITH D1 D2 D3 D4 D5 D6
D7 D8 D9
/RESCALE COVARIATE=STANDARDIZED
/PARTITION TRAINING=7 TESTING=3 HOLDOUT=0
/ARCHITECTURE AUTOMATIC=YES (MINUNITS=1 MAXUNITS=50)
/CRITERIA TRAINING=BATCH OPTIMIZATION=SCALEDCONJUGATE
LAMBDAINITIAL=0.000005
SIGMAINITIAL=0.00005 INTERVALCENTER=0 INTERVALOFFSET=0.5 MEMSIZE=1000
/PRINT CPS NETWORKINFO SUMMARY CLASSIFICATION SOLUTION IMPORTANCE
/PLOT NETWORK

```

```

/STOPPINGRULES ERRORSTEPS= 1 (DATA=AUTO) TRAININGTIMER=ON (MAXTIME=15)
MAXEPOCHS=AUTO
  ERRORCHANGE=1.0E-4 ERRORRATIO=0.001
/MISSING USERMISSING=EXCLUDE .

```

Multilayer Perceptron

Notes		
Output Created		13-DEC-2020 17:08:26
Comments		
Input	Data	C:\Users\vitart0\OneDrive\Documents\MyDocs\Science\Quarantine definition survey\SPSS\NN_EN_covid_nominal_9D.sav
	Active Dataset	DataSet1
	Filter	<none>
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	104
Missing Value Handling	Definition of Missing	User- and system-missing values are treated as missing.
	Cases Used	Statistics are based on cases with valid data for all variables used by the procedure.
Weight Handling		not applicable

Syntax

```
MLP STR_systemic
(MLEVEL=0) BY First_D
Second_D Third_D WITH D1
D2 D3 D4 D5 D6 D7 D8 D9
/RESCALE
COVARIATE=STANDARDIZ
ED
/PARTITION
TRAINING=7 TESTING=3
HOLDOUT=0
/ARCHITECTURE
AUTOMATIC=YES
(MINUNITS=1
MAXUNITS=50)
/CRITERIA
TRAINING=BATCH
OPTIMIZATION=SCALED
ONJUGATE
LAMBDAINITIAL=0.0000005
SIGMAINITIAL=0.00005
INTERVALCENTER=0
INTERVALOFFSET=0.5
MEMSIZE=1000
/PRINT CPS
NETWORKINFO SUMMARY
CLASSIFICATION
SOLUTION IMPORTANCE
/PLOT NETWORK
/STOPPINGRULES
ERRORSTEPS= 1
(DATA=AUTO)
TRAININGTIMER=ON
(MAXTIME=15)
MAXEPOCHS=AUTO

ERRORCHANGE=1.0E-4
ERRORRATIO=0.001
/MISSING
USERMISSING=EXCLUDE .
```

Resources	Processor Time	00:00:00.47
	Elapsed Time	00:00:00.49

Warnings

One or more cases in the testing or holdout sample have factor or dependent variable values that do not occur in the training sample.

These cases are excluded from the analysis.

Case Processing Summary

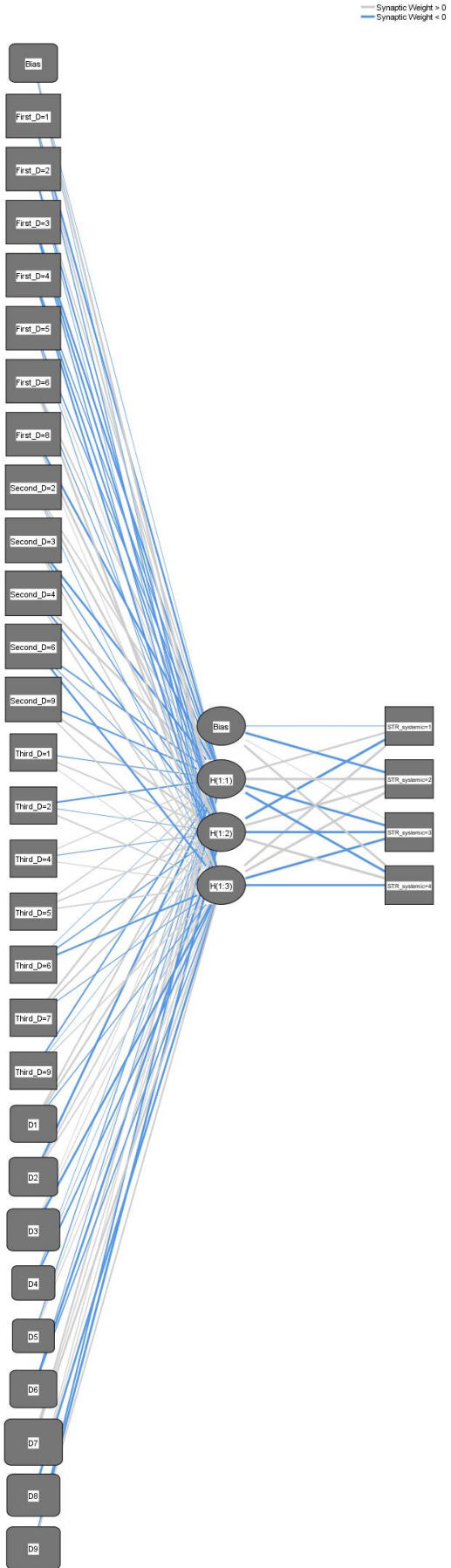
		N	Percent
Sample	Training	12	92.3%
	Testing	1	7.7%
Valid		13	100.0%
Excluded		91	
Total		104	

Network Information

Input Layer	Factors		
		1	First discourse in text
		2	Second discourse in text
		3	Third discourse in text
	Covariates	1	CONTACT RESTRICTION
		2	SANITATION AND HYGIENE
		3	ISOLATION OF INFECTED
		4	TOTAL ISOLATION
		5	HEALTH CARE
		6	VIRUS DISSEMINATION
		7	LIFESTYLE CHANGES
		8	RIGHTS AND FREEDOMS INFRINGEMENT

	9	BUREAUCRATIC RESPONSE
	Number of Units ^a	28
	Rescaling Method for Covariates	Standardized
Hidden Layer(s)	Number of Hidden Layers	1
	Number of Units in Hidden Layer 1 ^a	3
	Activation Function	Hyperbolic tangent
Output Layer	Dependent Variables	1
		Systemic strategy
	Number of Units	4
	Activation Function	Softmax
	Error Function	Cross-entropy

a. Excluding the bias unit



Hidden layer activation function: Hyperbolic tangent
 Output layer activation function: Softmax

Model Summary

Training	Cross Entropy Error	.070
	Percent Incorrect Predictions	0.0%
	Stopping Rule Used	1 consecutive step(s) with no decrease in error ^a
	Training Time	0:00:00.03
Testing	Cross Entropy Error	.129
	Percent Incorrect Predictions	0.0%

Dependent Variable: Systemic strategy

a. Error computations are based on the testing sample.

Parameter Estimates

Predictor	Hidden Layer 1			Predicted			
	H(1:1)	H(1:2)	H(1:3)	[STR_system ic=1]	[STR_system ic=2]	[STR_system ic=3]	[STR_system ic=4]
Input Layer							
(Bias)	-.036	1.604	-.047				
[First_D=1]	-.861	.638	-.277				
[First_D=2]	.359	-.562	-.083				
[First_D=3]	-.841	-.791	-.345				
[First_D=4]	-.271	-.587	-.786				
[First_D=5]	-.349	.148	-.095				
[First_D=6]	.528	-.201	1.349				
[First_D=8]	-.945	1.066	.087				
[Second_D=2	.441	.945	-.046				
]							
[Second_D=3	-1.039	-.301	.351				
]							
[Second_D=4	1.114	-.707	.488				
]							
[Second_D=6	-.491	-.118	-.928				
]							
[Second_D=9	-.578	.954	.424				
]							
[Third_D=1]	-.216	.524	.094				

[Third_D=2]	-0.615	-0.067	.480				
[Third_D=4]	.219	-0.097	.147				
[Third_D=5]	.357	.433	.385				
[Third_D=6]	-.014	-.317	-.799				
[Third_D=7]	.874	.745	-.150				
[Third_D=9]	-.501	-.015	.280				
D1	.702	.892	-.256				
D2	-1.195	.483	.376				
D3	.049	.136	-1.078				
D4	-.016	-.002	-.630				
D5	-.263	.191	.173				
D6	-.145	-1.070	-.359				
D7	.804	.295	.939				
D8	.175	.216	-.952				
D9	-.716	-1.294	.580				
Hidden Layer 1	(Bias)			-.068	-1.715	.092	1.598
	H(1:1)			.921	2.884	-1.908	-2.046
	H(1:2)			-2.762	1.971	-2.591	3.925
	H(1:3)			2.166	2.904	-2.318	-1.672

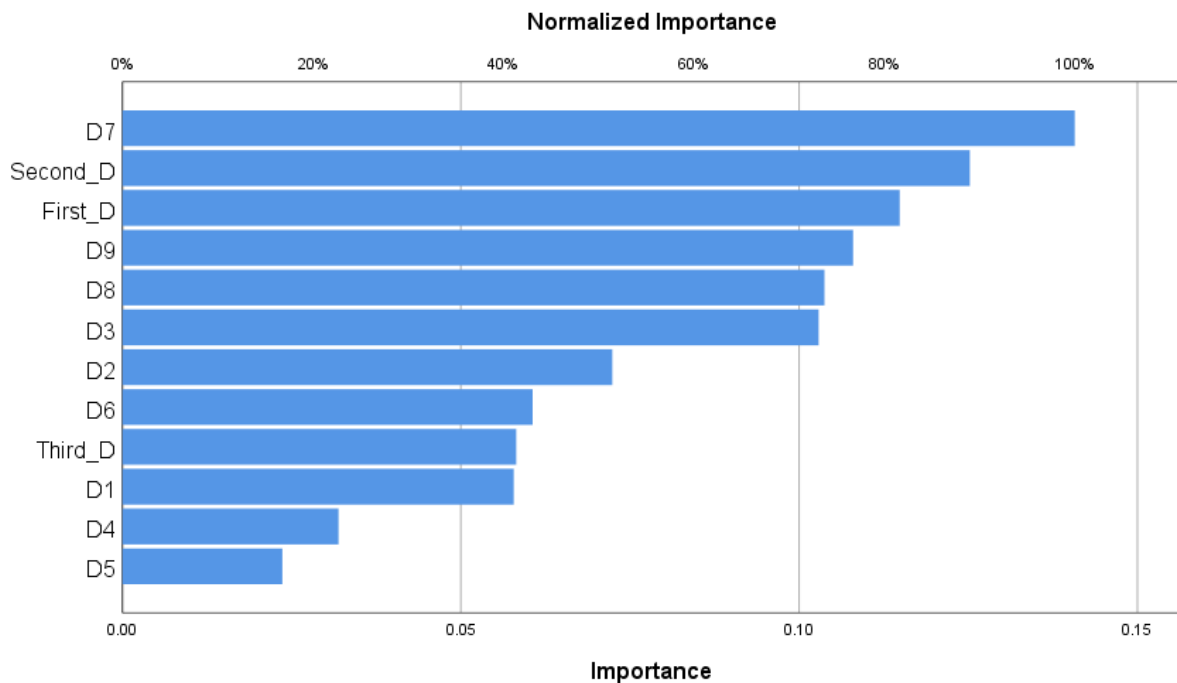
Classification

Sample	Observed	Predicted				Percent Correct
		worst option	mediocre option	good option	best option	
Training	worst option	1	0	0	0	100.0%
	mediocre option	0	1	0	0	100.0%
	good option	0	0	2	0	100.0%
	best option	0	0	0	8	100.0%
	Overall Percent	8.3%	8.3%	16.7%	66.7%	100.0%
Testing	worst option	0	0	0	0	0.0%
	mediocre option	0	1	0	0	100.0%
	good option	0	0	0	0	0.0%
	best option	0	0	0	0	0.0%
	Overall Percent	0.0%	100.0%	0.0%	0.0%	100.0%

Dependent Variable: Systemic strategy

Independent Variable Importance

	Importance	Normalized Importance
First discourse in text	.115	81.6%
Second discourse in text	.125	89.0%
Third discourse in text	.058	41.4%
CONTACT RESTRICTION	.058	41.1%
SANITATION AND HYGIENE	.072	51.4%
ISOLATION OF INFECTED	.103	73.1%
TOTAL ISOLATION	.032	22.7%
HEALTH CARE	.024	16.8%
VIRUS DISSEMINATION	.061	43.1%
LIFESTYLE CHANGES	.141	100.0%
RIGHTS AND FREEDOMS INFRINGEMENT	.104	73.7%
BUREAUCRATIC RESPONSE	.108	76.7%



*Multilayer Perceptron Network.

MLP STR_systemic (MLEVEL=0) BY First_D Second_D Third_D WITH D1 D2 D3 D4 D5 D6 D7 D8 D9

```

/RESCALE COVARIATE=STANDARDIZED
/PARTITION TRAINING=7 TESTING=3 HOLDOUT=0
/ARCHITECTURE AUTOMATIC=YES (MINUNITS=1 MAXUNITS=50)
/CRITERIA TRAINING=BATCH OPTIMIZATION=SCALEDCONJUGATE
LAMBDAINITIAL=0.0000005

```

```

    SIGMAINITIAL=0.00005 INTERVALCENTER=0 INTERVALOFFSET=0.5 MEMSIZE=1000
/PRINT CPS NETWORKINFO SUMMARY CLASSIFICATION SOLUTION IMPORTANCE
/PLOT NETWORK
/STOPPINGRULES ERRORSTEPS= 1 (DATA=AUTO) TRAININGTIMER=ON (MAXTIME=15)
MAXEPOCHS=AUTO
    ERRORCHANGE=1.0E-4 ERRORRATIO=0.001
/MISSING USERMISSING=EXCLUDE .

```

Multilayer Perceptron

Notes

Output Created		13-DEC-2020 17:08:33
Comments		
Input	Data	C:\Users\vitart0\OneDrive\Documents\MyDocs\Science\Quarantine definition survey\SPSS\NN_EN_covid_nominal_9D.sav
	Active Dataset	DataSet1
	Filter	<none>
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	104
Missing Value Handling	Definition of Missing	User- and system-missing values are treated as missing.
	Cases Used	Statistics are based on cases with valid data for all variables used by the procedure.
Weight Handling		not applicable

Syntax

```

MLP STR_systemic
(MLEVEL=0) BY First_D
Second_D Third_D WITH D1
D2 D3 D4 D5 D6 D7 D8 D9
/RESCALE
COVARIATE=STANDARDIZ
ED
/PARTITION
TRAINING=7 TESTING=3
HOLDOUT=0
/ARCHITECTURE
AUTOMATIC=YES
(MINUNITS=1
MAXUNITS=50)
/CRITERIA
TRAINING=BATCH
OPTIMIZATION=SCALED
ONJUGATE
LAMBDAINITIAL=0.0000005
SIGMAINITIAL=0.00005
INTERVALCENTER=0
INTERVALOFFSET=0.5
MEMSIZE=1000
/PRINT CPS
NETWORKINFO SUMMARY
CLASSIFICATION
SOLUTION IMPORTANCE
/PLOT NETWORK
/STOPPINGRULES
ERRORSTEPS= 1
(DATA=AUTO)
TRAININGTIMER=ON
(MAXTIME=15)
MAXEPOCHS=AUTO

ERRORCHANGE=1.0E-4
ERRORRATIO=0.001
/MISSING
USERMISSING=EXCLUDE .

```

Resources	Processor Time	00:00:00.42
	Elapsed Time	00:00:00.49

Warnings

One or more cases in the testing or holdout sample have factor or dependent variable values that do not occur in the training sample.

These cases are excluded from the analysis.

Case Processing Summary

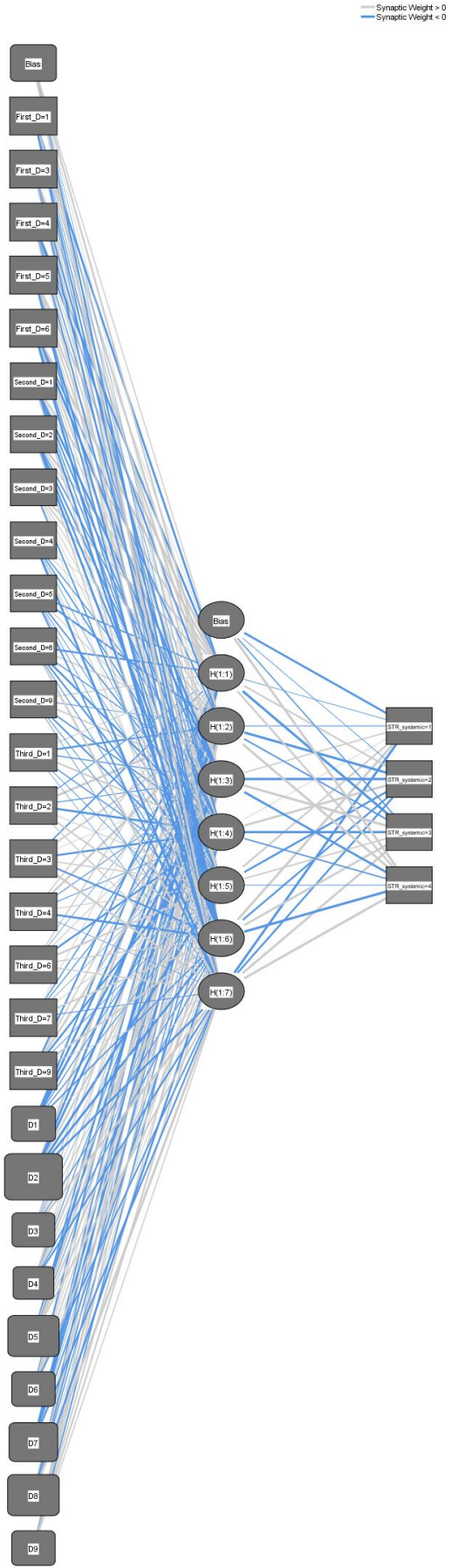
		N	Percent
Sample	Training	11	84.6%
	Testing	2	15.4%
Valid		13	100.0%
Excluded		91	
Total		104	

Network Information

Input Layer	Factors		
		1	First discourse in text
		2	Second discourse in text
		3	Third discourse in text
	Covariates	1	CONTACT RESTRICTION
		2	SANITATION AND HYGIENE
		3	ISOLATION OF INFECTED
		4	TOTAL ISOLATION
		5	HEALTH CARE
		6	VIRUS DISSEMINATION
		7	LIFESTYLE CHANGES
		8	RIGHTS AND FREEDOMS INFRINGEMENT

	9	BUREAUCRATIC RESPONSE
	Number of Units ^a	28
	Rescaling Method for Covariates	Standardized
Hidden Layer(s)	Number of Hidden Layers	1
	Number of Units in Hidden Layer 1 ^a	7
	Activation Function	Hyperbolic tangent
Output Layer	Dependent Variables	1
		Systemic strategy
	Number of Units	4
	Activation Function	Softmax
	Error Function	Cross-entropy

a. Excluding the bias unit



Hidden layer activation function: Hyperbolic tangent
 Output layer activation function: Softmax

Model Summary

Training	Cross Entropy Error	.606
	Percent Incorrect Predictions	0.0%
	Stopping Rule Used	1 consecutive step(s) with no decrease in error ^a
	Training Time	0:00:00.01
Testing	Cross Entropy Error	.277
	Percent Incorrect Predictions	0.0%

Dependent Variable: Systemic strategy

a. Error computations are based on the testing sample.

Parameter Estimates

Predictor	Hidden Layer 1							Predicted	Output Layer			
	H(1:1)	H(1:2)	H(1:3)	H(1:4)	H(1:5)	H(1:6)	H(1:7)	[STR_syste mic=1]	[STR_syste mic=2]	[STR_syste mic=3]	[STR_syste mic=4]	
Input Layer												
(Bias)	.196	.483	.014	.000	-.011	-.397	.659					
[First_D=1]	-.582	.572	.311	-.042	-.130	-.353	-.076					
[First_D=3]	.031	.549	.229	-.424	.351	-.430	.270					
[First_D=4]	-.562	-.431	.049	-.201	.199	-.330	.271					
[First_D=5]	.750	.025	.448	.353	.084	-.535	-.336					
[First_D=6]	.650	-.352	-.690	.492	.131	-.256	-.722					
[Second_D=1]	.436	.137	-.583	-.357	-.206	-.553	.304					
[Second_D=2]	.591	.233	-.271	-.355	-.429	-.595	.277					
[Second_D=3]	.525	.385	.131	.095	.048	-.302	.009					
[Second_D=4]	.068	.074	-.193	-.275	-.053	.137	-.611					
[Second_D=5]	-.346	-.447	.118	-.297	-.074	-.060	-.368					
[Second_D=6]	-.438	.263	-.190	-.507	-.374	-.109	.517					

[Second_D=	.195	-.075	.339	-.286	-.377	-.087	-.061				
g]											
[Third_D=1]	.121	-.429	-.199	.386	-.202	-.075	-.034				
[Third_D=2]	-.158	.864	-.131	-.609	.114	.388	.225				
[Third_D=3]	-.314	.423	.021	-.516	.266	-.397	.582				
[Third_D=4]	.252	.660	-.128	-.086	.096	-.577	-.045				
[Third_D=6]	.267	-.047	.117	-.467	.517	.241	.224				
[Third_D=7]	.063	-.250	-.171	-.029	.076	.389	-.092				
[Third_D=9]	-.410	.278	.592	-.505	-.075	.545	.083				
D1	-.394	-.645	-.831	-.167	-.166	-.303	.027				
D2	.814	-.630	-.612	.485	-.973	-.680	-.565				
D3	-.021	.310	.162	-.036	.151	-.199	.711				
D4	.115	.217	-.137	.509	.186	-.245	-.404				
D5	-.396	-.914	.769	-.079	.401	.331	.379				
D6	-.417	.262	.077	.285	.053	.507	-.326				
D7	-.314	-1.182	-.543	-.011	-.273	.077	-.395				
D8	-.293	.892	-.293	-.187	.095	-.536	1.004				
D9	-.003	.582	.390	-.298	.320	.395	.201				
Hidden Layer	(Bias)							-.582	-.065	-.234	1.157
1	H(1:1)							-.060	.419	-1.278	.516
	H(1:2)							-.079	-1.158	-.320	1.018
	H(1:3)							.279	-1.425	1.482	-.619
	H(1:4)							.040	.750	-.931	-.292
	H(1:5)							.443	-.512	.322	-.057
	H(1:6)							.951	-.433	.600	-1.311
	H(1:7)							-1.065	-.478	.928	1.316

Classification

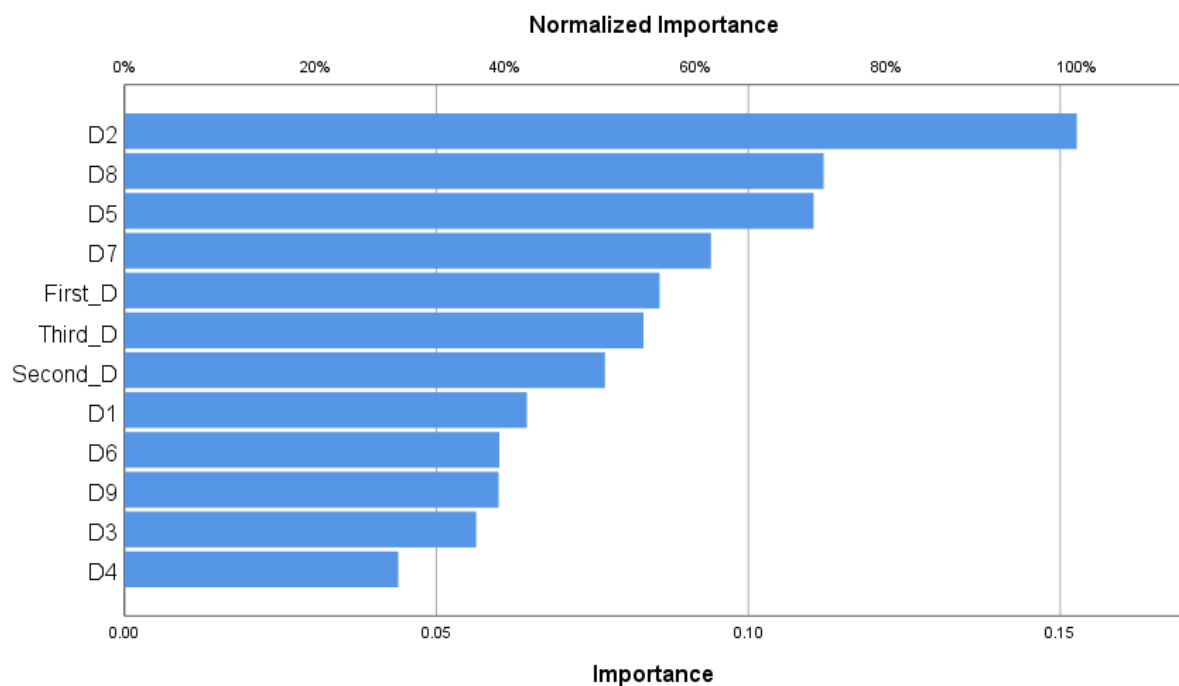
Sample	Observed	worst option	Predicted			Percent Correct
			mediocre option	good option	best option	
Training	worst option	1	0	0	0	100.0%
	mediocre option	0	2	0	0	100.0%
	good option	0	0	2	0	100.0%
	best option	0	0	0	6	100.0%
	Overall Percent	9.1%	18.2%	18.2%	54.5%	100.0%
Testing	worst option	0	0	0	0	0.0%
	mediocre option	0	0	0	0	0.0%
	good option	0	0	1	0	100.0%

best option	0	0	0	1	100.0%
Overall Percent	0.0%	0.0%	50.0%	50.0%	100.0%

Dependent Variable: Systemic strategy

Independent Variable Importance

	Importance	Normalized Importance
First discourse in text	.086	56.2%
Second discourse in text	.077	50.5%
Third discourse in text	.083	54.5%
CONTACT RESTRICTION	.065	42.3%
SANITATION AND HYGIENE	.153	100.0%
ISOLATION OF INFECTED	.056	36.9%
TOTAL ISOLATION	.044	28.8%
HEALTH CARE	.110	72.4%
VIRUS DISSEMINATION	.060	39.4%
LIFESTYLE CHANGES	.094	61.6%
RIGHTS AND FREEDOMS INFRINGEMENT	.112	73.4%
BUREAUCRATIC RESPONSE	.060	39.3%



```

*Multilayer Perceptron Network.
MLP STR_systemic (MLEVEL=0) BY First_D Second_D Third_D WITH D1 D2 D3 D4 D5 D6
D7 D8 D9
/RESCALE COVARIATE=STANDARDIZED
/PARTITION TRAINING=7 TESTING=3 HOLDOUT=0
/ARCHITECTURE AUTOMATIC=YES (MINUNITS=1 MAXUNITS=50)
/CRITERIA TRAINING=BATCH OPTIMIZATION=SCALEDCONJUGATE
LAMBDAINITIAL=0.000005
SIGMAINITIAL=0.00005 INTERVALCENTER=0 INTERVALOFFSET=0.5 MEMSIZE=1000
/PRINT CPS NETWORKINFO SUMMARY CLASSIFICATION SOLUTION IMPORTANCE
/PLOT NETWORK
/STOPPINGRULES ERRORSTEPS= 1 (DATA=AUTO) TRAININGTIMER=ON (MAXTIME=15)
MAXEPOCHS=AUTO
ERRORCHANGE=1.0E-4 ERRORRATIO=0.001
/MISSING USERMISSING=EXCLUDE .

```

Multilayer Perceptron

Notes

Output Created		13-DEC-2020 17:08:38
Comments		
Input	Data	C:\Users\vitart0\OneDrive\Documents\MyDocs\Science\Quarantine definition survey\SPSS\NN_EN_covid_nominal_9D.sav
	Active Dataset	DataSet1
	Filter	<none>
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	104
Missing Value Handling	Definition of Missing	User- and system-missing values are treated as missing.
	Cases Used	Statistics are based on cases with valid data for all variables used by the procedure.
Weight Handling		not applicable

Syntax

```
MLP STR_systemic
(MLEVEL=0) BY First_D
Second_D Third_D WITH D1
D2 D3 D4 D5 D6 D7 D8 D9
/RESCALE
COVARIATE=STANDARDIZ
ED
/PARTITION
TRAINING=7 TESTING=3
HOLDOUT=0
/ARCHITECTURE
AUTOMATIC=YES
(MINUNITS=1
MAXUNITS=50)
/CRITERIA
TRAINING=BATCH
OPTIMIZATION=SCALED
ONJUGATE
LAMBDAINITIAL=0.0000005
SIGMAINITIAL=0.00005
INTERVALCENTER=0
INTERVALOFFSET=0.5
MEMSIZE=1000
/PRINT CPS
NETWORKINFO SUMMARY
CLASSIFICATION
SOLUTION IMPORTANCE
/PLOT NETWORK
/STOPPINGRULES
ERRORSTEPS= 1
(DATA=AUTO)
TRAININGTIMER=ON
(MAXTIME=15)
MAXEPOCHS=AUTO

ERRORCHANGE=1.0E-4
ERRORRATIO=0.001
/MISSING
USERMISSING=EXCLUDE .
```

Resources	Processor Time	00:00:00.44
	Elapsed Time	00:00:00.48

Case Processing Summary

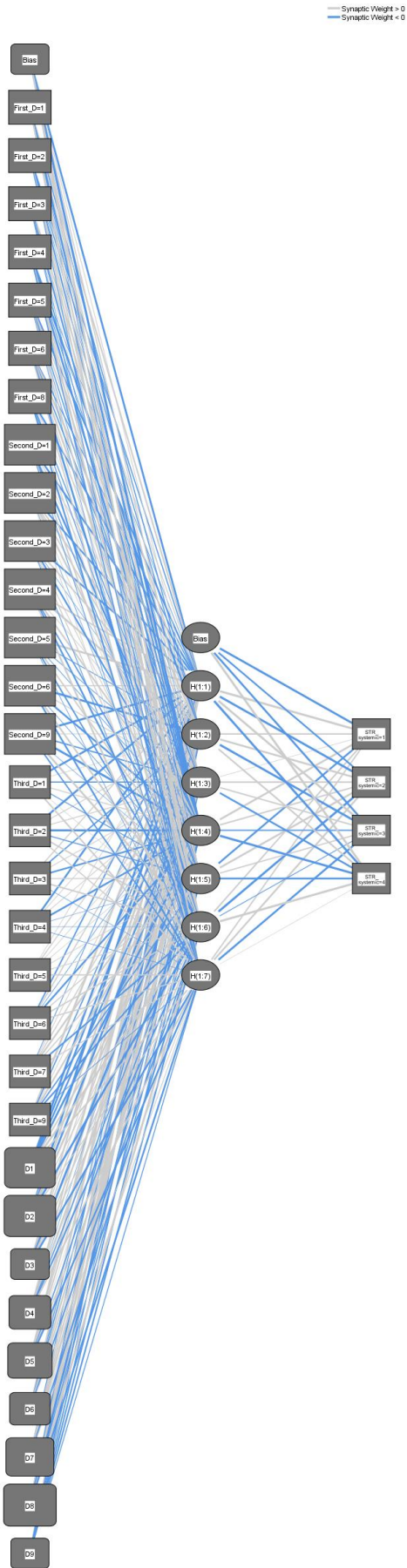
		N	Percent
Sample	Training	14	93.3%
	Testing	1	6.7%
Valid		15	100.0%
Excluded		89	
Total		104	

Network Information

Input Layer	Factors	1	First discourse in text
		2	Second discourse in text
		3	Third discourse in text
	Covariates	1	CONTACT RESTRICTION
		2	SANITATION AND HYGIENE
		3	ISOLATION OF INFECTED
		4	TOTAL ISOLATION
		5	HEALTH CARE
		6	VIRUS DISSEMINATION
		7	LIFESTYLE CHANGES
8		RIGHTS AND FREEDOMS INFRINGEMENT	
9		BUREAUCRATIC RESPONSE	
Number of Units ^a		31	
Rescaling Method for Covariates		Standardized	
Hidden Layer(s)	Number of Hidden Layers		1
	Number of Units in Hidden Layer 1 ^a		7

	Activation Function		Hyperbolic tangent
Output Layer	Dependent Variables	1	Systemic strategy
	Number of Units		4
	Activation Function		Softmax
	Error Function		Cross-entropy

a. Excluding the bias unit



Hidden layer activation function: Hyperbolic tangent
 Output layer activation function: Softmax

Model Summary

Training	Cross Entropy Error	.991
	Percent Incorrect Predictions	0.0%
	Stopping Rule Used	1 consecutive step(s) with no decrease in error ^a
	Training Time	0:00:00.01
Testing	Cross Entropy Error	6.613E-10
	Percent Incorrect Predictions	0.0%

Dependent Variable: Systemic strategy

a. Error computations are based on the testing sample.

Parameter Estimates

Predictor	Hidden Layer 1							Predicted	Output Layer			
	H(1:1)	H(1:2)	H(1:3)	H(1:4)	H(1:5)	H(1:6)	H(1:7)	[STR_syste mic=1]	[STR_syste mic=2]	[STR_syste mic=3]	[STR_syste mic=4]	
Input Layer												
(Bias)	-1.773	.267	.476	-3.857	.102	2.066	.481					
[First_D=1]	1.019	-.472	.336	-1.839	-.272	1.086	.536					
[First_D=2]	-.508	-.471	-.046	-.822	.679	.766	-.329					
[First_D=3]	.338	.778	.715	-1.067	.076	-.111	-.349					
[First_D=4]	-.152	-2.105	-.320	-1.760	.477	1.637	-.595					
[First_D=5]	-1.135	.390	.698	-.484	-.201	.932	-.117					
[First_D=6]	-.441	1.642	-.583	1.571	.373	-1.716	.620					
[First_D=8]	-1.310	.245	.029	-.427	-.366	.338	-1.042					
[Second_D=1]	-1.356	.330	.125	-1.640	-.378	.916	-.305					
[Second_D=2]	-1.179	.934	.659	1.458	.096	-.079	.241					
[Second_D=3]	-1.324	.777	-.051	-1.228	.313	.427	-.313					
[Second_D=4]	.824	1.785	.193	1.159	-.671	-1.260	1.585					
[Second_D=5]	2.419	-.328	-.264	-.216	.851	-.907	-.113					

[Second_D=6]	.498	-2.334	.356	-1.508	-.162	1.429	-1.301				
[Second_D=9]	-2.385	.172	-.707	-2.528	-.009	1.934	-.775				
[Third_D=1]	-1.862	.062	-.600	.376	-.357	.016	1.160				
[Third_D=2]	-2.097	.320	.367	-2.497	-.448	.993	.587				
[Third_D=3]	.522	-.743	.312	-1.153	.425	.922	-.045				
[Third_D=4]	-1.731	.252	.303	-1.400	-.006	-.023	-.112				
[Third_D=5]	.137	.443	.143	.101	.208	.299	.642				
[Third_D=6]	-.795	.573	-.106	-1.388	.456	.764	.634				
[Third_D=7]	-.304	.273	.483	1.552	.529	-1.075	.428				
[Third_D=9]	2.450	-.581	.242	1.394	-.707	-1.112	-.254				
D1	-3.300	-1.560	-1.274	-2.018	1.037	2.066	.996				
D2	-6.342	1.190	-2.032	2.317	.370	-2.389	.386				
D3	1.390	.359	.657	-3.009	.692	.387	-1.605				
D4	1.020	.730	-.059	2.181	-.531	-1.045	1.259				
D5	2.777	.584	.851	.036	-.629	.644	-1.287				
D6	1.628	-.337	-.639	1.356	1.032	-.804	.289				
D7	-.397	1.002	.926	2.090	.294	-1.080	.319				
D8	-1.943	2.756	2.057	-3.962	-.470	2.478	-1.330				
D9	4.460	-.807	-.335	-.704	-.832	-.960	-.373				
Hidden Layer 1 (Bias)								-2.688	-1.315	-1.963	6.793
H(1:1)								3.409	-3.539	3.063	-3.745
H(1:2)								.978	1.777	-3.358	1.277
H(1:3)								.088	1.003	.892	-1.551
H(1:4)								1.814	.909	-.735	-3.406
H(1:5)								-1.599	1.762	.669	-1.468
H(1:6)								.945	-3.377	-.325	3.555
H(1:7)								.796	1.475	-1.929	.008

Classification

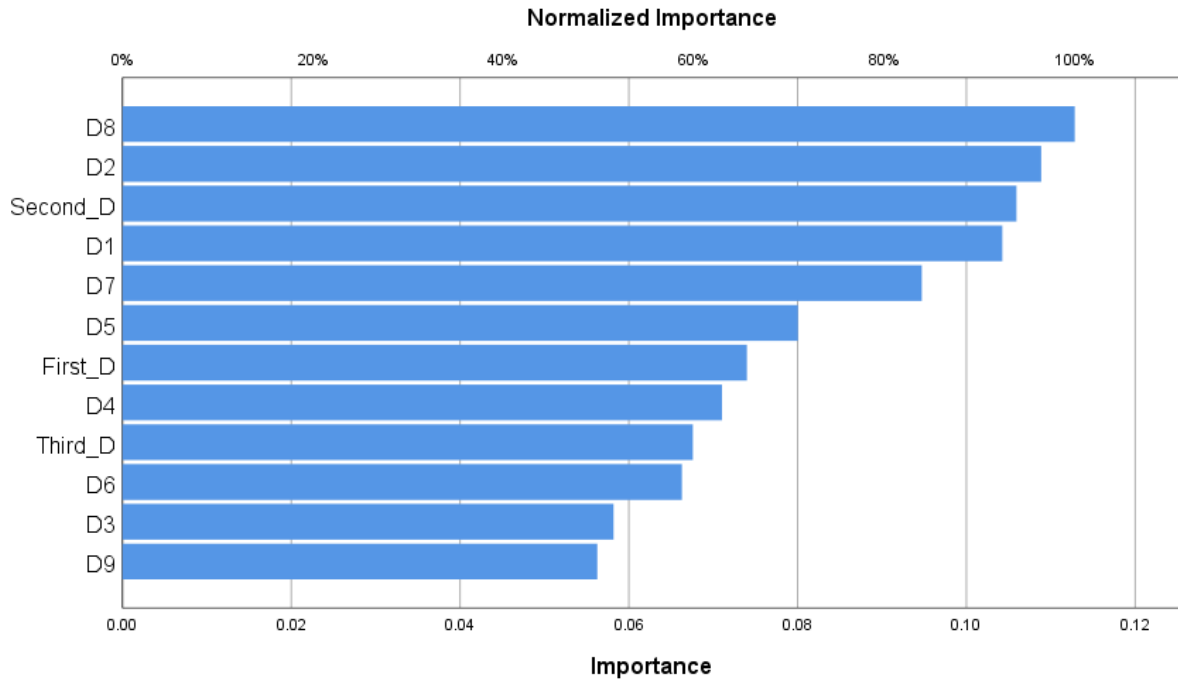
Sample	Observed	worst option	Predicted			Percent Correct
			mediocre option	good option	best option	
Training	worst option	1	0	0	0	100.0%
	mediocre option	0	2	0	0	100.0%
	good option	0	0	3	0	100.0%
	best option	0	0	0	8	100.0%
	Overall Percent		7.1%	14.3%	21.4%	57.1%

Testing	worst option	0	0	0	0	0.0%
	mediocre option	0	0	0	0	0.0%
	good option	0	0	0	0	0.0%
	best option	0	0	0	1	100.0%
	Overall Percent	0.0%	0.0%	0.0%	100.0%	100.0%

Dependent Variable: Systemic strategy

Independent Variable Importance

	Importance	Normalized Importance
First discourse in text	.074	65.6%
Second discourse in text	.106	93.9%
Third discourse in text	.068	59.9%
CONTACT RESTRICTION	.104	92.4%
SANITATION AND HYGIENE	.109	96.5%
ISOLATION OF INFECTED	.058	51.6%
TOTAL ISOLATION	.071	62.9%
HEALTH CARE	.080	70.9%
VIRUS DISSEMINATION	.066	58.7%
LIFESTYLE CHANGES	.095	83.9%
RIGHTS AND FREEDOMS INFRINGEMENT	.113	100.0%
BUREAUCRATIC RESPONSE	.056	49.9%



```

*Multilayer Perceptron Network.
MLP STR_systemic (MLEVEL=0) BY First_D Second_D Third_D WITH D1 D2 D3 D4 D5 D6
D7 D8 D9
/RESCALE COVARIATE=STANDARDIZED
/PARTITION TRAINING=7 TESTING=3 HOLDOUT=0
/ARCHITECTURE AUTOMATIC=YES (MINUNITS=1 MAXUNITS=50)
/CRITERIA TRAINING=BATCH OPTIMIZATION=SCALEDCONJUGATE
LAMBDAINITIAL=0.0000005
SIGMAINITIAL=0.00005 INTERVALCENTER=0 INTERVALOFFSET=0.5 MEMSIZE=1000
/PRINT CPS NETWORKINFO SUMMARY CLASSIFICATION SOLUTION IMPORTANCE
/PLOT NETWORK
/STOPPINGRULES ERRORSTEPS= 1 (DATA=AUTO) TRAININGTIMER=ON (MAXTIME=15)
MAXEPOCHS=AUTO
ERRORCHANGE=1.0E-4 ERRORRATIO=0.001
/MISSING USERMISSING=EXCLUDE .

```

Multilayer Perceptron

Notes

Output Created

13-DEC-2020 17:08:49

Comments

Input	Data	C:\Users\vitart0\OneDrive\Documents\!MyDocs\!Siience\Quarantine definition survey\SPSS\NN_EN_covid_nominal_9D.sav
	Active Dataset	DataSet1
	Filter	<none>
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	104
Missing Value Handling	Definition of Missing	User- and system-missing values are treated as missing.
	Cases Used	Statistics are based on cases with valid data for all variables used by the procedure.
Weight Handling		not applicable

Syntax

```
MLP STR_systemic
(MLEVEL=0) BY First_D
Second_D Third_D WITH D1
D2 D3 D4 D5 D6 D7 D8 D9
/RESCALE
COVARIATE=STANDARDIZ
ED
/PARTITION
TRAINING=7 TESTING=3
HOLDOUT=0
/ARCHITECTURE
AUTOMATIC=YES
(MINUNITS=1
MAXUNITS=50)
/CRITERIA
TRAINING=BATCH
OPTIMIZATION=SCALED
ONJUGATE
LAMBDAINITIAL=0.0000005
SIGMAINITIAL=0.00005
INTERVALCENTER=0
INTERVALOFFSET=0.5
MEMSIZE=1000
/PRINT CPS
NETWORKINFO SUMMARY
CLASSIFICATION
SOLUTION IMPORTANCE
/PLOT NETWORK
/STOPPINGRULES
ERRORSTEPS= 1
(DATA=AUTO)
TRAININGTIMER=ON
(MAXTIME=15)
MAXEPOCHS=AUTO

ERRORCHANGE=1.0E-4
ERRORRATIO=0.001
/MISSING
USERMISSING=EXCLUDE .
```

Resources	Processor Time	00:00:00.45
	Elapsed Time	00:00:00.46

Warnings

One or more cases in the testing or holdout sample have factor or dependent variable values that do not occur in the training sample.

These cases are excluded from the analysis.

Case Processing Summary

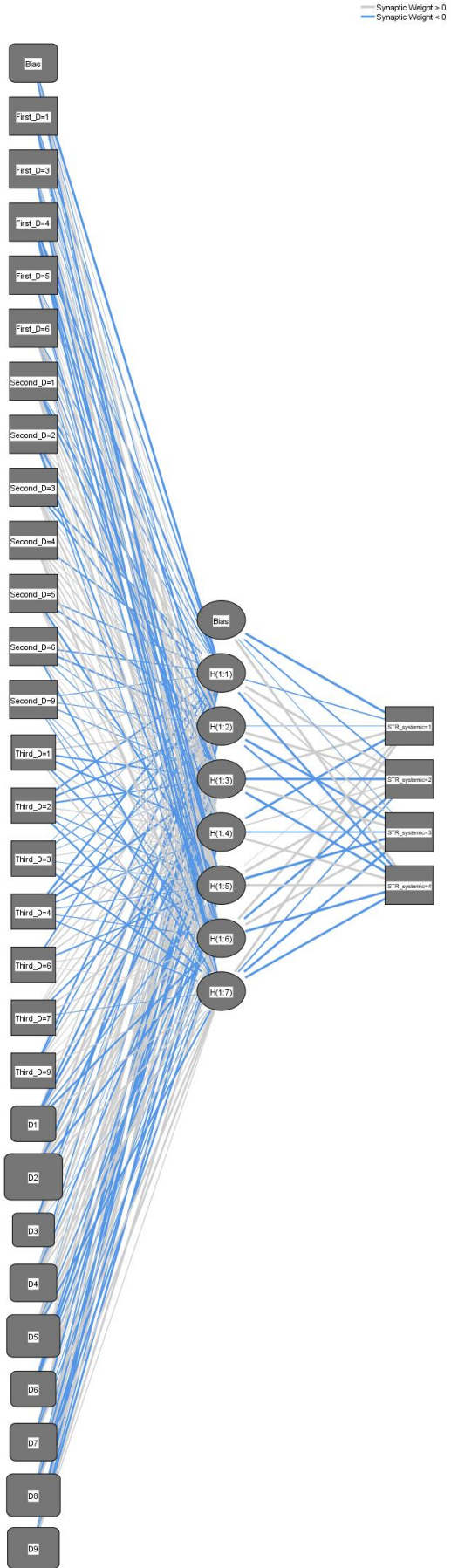
		N	Percent
Sample	Training	12	92.3%
	Testing	1	7.7%
Valid		13	100.0%
Excluded		91	
Total		104	

Network Information

Input Layer	Factors		
		1	First discourse in text
		2	Second discourse in text
		3	Third discourse in text
	Covariates	1	CONTACT RESTRICTION
		2	SANITATION AND HYGIENE
		3	ISOLATION OF INFECTED
		4	TOTAL ISOLATION
		5	HEALTH CARE
		6	VIRUS DISSEMINATION
		7	LIFESTYLE CHANGES
		8	RIGHTS AND FREEDOMS INFRINGEMENT

	9	BUREAUCRATIC RESPONSE
	Number of Units ^a	28
	Rescaling Method for Covariates	Standardized
Hidden Layer(s)	Number of Hidden Layers	1
	Number of Units in Hidden Layer 1 ^a	7
	Activation Function	Hyperbolic tangent
Output Layer	Dependent Variables	1
		Systemic strategy
	Number of Units	4
	Activation Function	Softmax
	Error Function	Cross-entropy

a. Excluding the bias unit



Hidden layer activation function: Hyperbolic tangent
 Output layer activation function: Softmax

Model Summary

Training	Cross Entropy Error	.054
	Percent Incorrect Predictions	0.0%
	Stopping Rule Used	1 consecutive step(s) with no decrease in error ^a
	Training Time	0:00:00.02
Testing	Cross Entropy Error	.002
	Percent Incorrect Predictions	0.0%

Dependent Variable: Systemic strategy

a. Error computations are based on the testing sample.

Parameter Estimates

Predictor	Hidden Layer 1							Predicted	Output Layer			
	H(1:1)	H(1:2)	H(1:3)	H(1:4)	H(1:5)	H(1:6)	H(1:7)	[STR_syste mic=1]	[STR_syste mic=2]	[STR_syste mic=3]	[STR_syste mic=4]	
Input Layer												
(Bias)	-1.242	.132	-.137	.530	.261	-.509	-.028					
[First_D=1]	-.406	.111	-.149	.175	-.668	-.071	-.023					
[First_D=3]	.081	-.089	.091	.430	-.373	.555	-.731					
[First_D=4]	-.890	-.681	.258	.254	-1.087	-.278	-.815					
[First_D=5]	-.155	.290	.005	.080	.327	-.389	-.105					
[First_D=6]	-.304	.835	.289	-.253	.952	-.206	.333					
[Second_D=1]	-.142	-.785	-.538	.554	.100	.214	.381					
[Second_D=2]	.089	.404	-1.031	.033	.530	-.453	-.222					
[Second_D=3]	-.547	-.504	-.025	.242	.886	.087	.214					
[Second_D=4]	-.439	.177	.394	.282	.274	.126	1.374					
[Second_D=5]	-.349	-.552	1.103	.244	-.692	.462	.200					
[Second_D=6]	-.383	-.579	-.162	-.193	.025	.338	-.472					

[Second_D=	-0.184	-0.169	-0.273	0.073	-0.110	-0.129	-0.201				
g]											
[Third_D=1]	0.232	0.368	-0.557	-0.636	0.218	-0.462	0.362				
[Third_D=2]	-0.629	-0.621	-0.504	0.249	-0.254	-0.302	-0.572				
[Third_D=3]	-0.065	-0.210	-0.040	0.131	-0.094	0.257	-0.573				
[Third_D=4]	-0.865	-0.347	-0.948	-0.280	-0.160	-0.159	-0.319				
[Third_D=6]	-0.458	0.431	0.291	0.336	-0.441	0.129	0.076				
[Third_D=7]	0.100	0.241	0.309	-0.467	0.391	0.246	-0.090				
[Third_D=9]	-0.594	-0.320	0.378	0.102	0.081	0.227	0.240				
D1	0.273	-0.762	-0.933	0.481	-0.299	-0.803	0.319				
D2	1.154	0.822	-1.237	0.778	1.404	-0.897	0.394				
D3	-0.970	-0.131	0.258	0.660	0.071	0.034	-0.048				
D4	-0.367	0.814	-0.071	-0.550	1.072	0.185	0.456				
D5	0.128	-0.105	2.056	0.491	-0.363	1.354	-0.554				
D6	0.086	0.446	-0.531	-1.509	-0.537	-0.112	0.152				
D7	0.132	0.617	-0.620	0.042	-0.140	-0.237	0.840				
D8	-0.362	0.914	-0.872	0.884	-0.886	-0.577	0.795				
D9	-1.143	-1.004	0.617	-0.426	-0.895	0.880	0.177				
Hidden Layer	(Bias)							-1.335	-0.451	-0.104	2.553
1	H(1:1)							-0.284	2.302	0.452	-1.034
	H(1:2)							-0.080	1.969	-1.301	-0.569
	H(1:3)							1.298	-1.818	1.262	-1.147
	H(1:4)							-1.107	0.311	-0.336	1.084
	H(1:5)							0.079	2.675	-3.466	0.818
	H(1:6)							1.296	-1.088	1.630	-1.432
	H(1:7)							2.076	-0.387	-1.163	-1.310

Classification

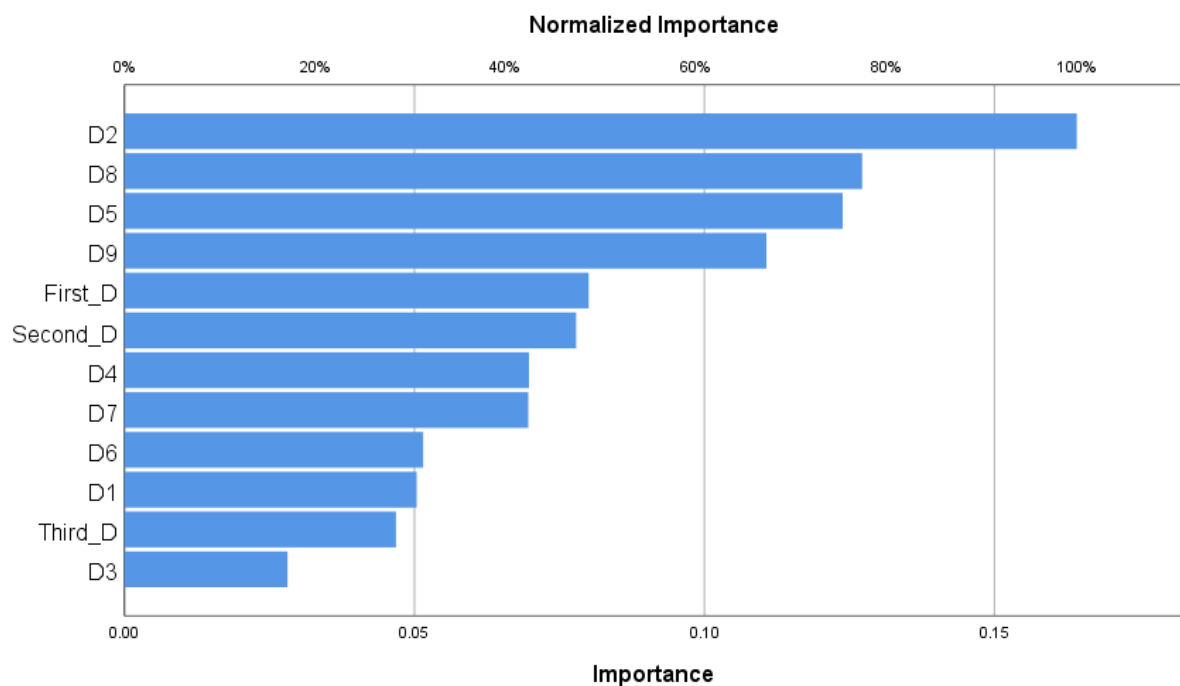
Sample	Observed	worst option	Predicted			Percent Correct
			mediocre option	good option	best option	
Training	worst option	1	0	0	0	100.0%
	mediocre option	0	2	0	0	100.0%
	good option	0	0	3	0	100.0%
	best option	0	0	0	6	100.0%
	Overall Percent	8.3%	16.7%	25.0%	50.0%	100.0%
Testing	worst option	0	0	0	0	0.0%
	mediocre option	0	0	0	0	0.0%
	good option	0	0	0	0	0.0%

best option	0	0	0	1	100.0%
Overall Percent	0.0%	0.0%	0.0%	100.0%	100.0%

Dependent Variable: Systemic strategy

Independent Variable Importance

	Importance	Normalized Importance
First discourse in text	.080	48.7%
Second discourse in text	.078	47.4%
Third discourse in text	.047	28.5%
CONTACT RESTRICTION	.050	30.7%
SANITATION AND HYGIENE	.164	100.0%
ISOLATION OF INFECTED	.028	17.1%
TOTAL ISOLATION	.070	42.5%
HEALTH CARE	.124	75.4%
VIRUS DISSEMINATION	.051	31.4%
LIFESTYLE CHANGES	.070	42.4%
RIGHTS AND FREEDOMS INFRINGEMENT	.127	77.5%
BUREAUCRATIC RESPONSE	.111	67.4%



```

*Multilayer Perceptron Network.
MLP STR_systemic (MLEVEL=0) BY First_D Second_D Third_D WITH D1 D2 D3 D4 D5 D6
D7 D8 D9
/RESCALE COVARIATE=STANDARDIZED
/PARTITION TRAINING=7 TESTING=3 HOLDOUT=0
/ARCHITECTURE AUTOMATIC=YES (MINUNITS=1 MAXUNITS=50)
/CRITERIA TRAINING=BATCH OPTIMIZATION=SCALEDCONJUGATE
LAMBDAINITIAL=0.000005
SIGMAINITIAL=0.00005 INTERVALCENTER=0 INTERVALOFFSET=0.5 MEMSIZE=1000
/PRINT CPS NETWORKINFO SUMMARY CLASSIFICATION SOLUTION IMPORTANCE
/PLOT NETWORK
/STOPPINGRULES ERRORSTEPS= 1 (DATA=AUTO) TRAININGTIMER=ON (MAXTIME=15)
MAXEPOCHS=AUTO
ERRORCHANGE=1.0E-4 ERRORRATIO=0.001
/MISSING USERMISSING=EXCLUDE .

```

Multilayer Perceptron

Notes

Output Created		13-DEC-2020 17:09:01
Comments		
Input	Data	C:\Users\vitart0\OneDrive\Documents\MyDocs\Science\Quarantine definition survey\SPSS\NN_EN_covid_nominal_9D.sav
	Active Dataset	DataSet1
	Filter	<none>
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	104
Missing Value Handling	Definition of Missing	User- and system-missing values are treated as missing.
	Cases Used	Statistics are based on cases with valid data for all variables used by the procedure.
Weight Handling		not applicable

Syntax

```
MLP STR_systemic
(MLEVEL=0) BY First_D
Second_D Third_D WITH D1
D2 D3 D4 D5 D6 D7 D8 D9
/RESCALE
COVARIATE=STANDARDIZ
ED
/PARTITION
TRAINING=7 TESTING=3
HOLDOUT=0
/ARCHITECTURE
AUTOMATIC=YES
(MINUNITS=1
MAXUNITS=50)
/CRITERIA
TRAINING=BATCH
OPTIMIZATION=SCALED
ONJUGATE
LAMBDAINITIAL=0.0000005
SIGMAINITIAL=0.00005
INTERVALCENTER=0
INTERVALOFFSET=0.5
MEMSIZE=1000
/PRINT CPS
NETWORKINFO SUMMARY
CLASSIFICATION
SOLUTION IMPORTANCE
/PLOT NETWORK
/STOPPINGRULES
ERRORSTEPS= 1
(DATA=AUTO)
TRAININGTIMER=ON
(MAXTIME=15)
MAXEPOCHS=AUTO

ERRORCHANGE=1.0E-4
ERRORRATIO=0.001
/MISSING
USERMISSING=EXCLUDE .
```

Resources	Processor Time	00:00:00.39
	Elapsed Time	00:00:00.42

Warnings

One or more cases in the testing or holdout sample have factor or dependent variable values that do not occur in the training sample.

These cases are excluded from the analysis.

Case Processing Summary

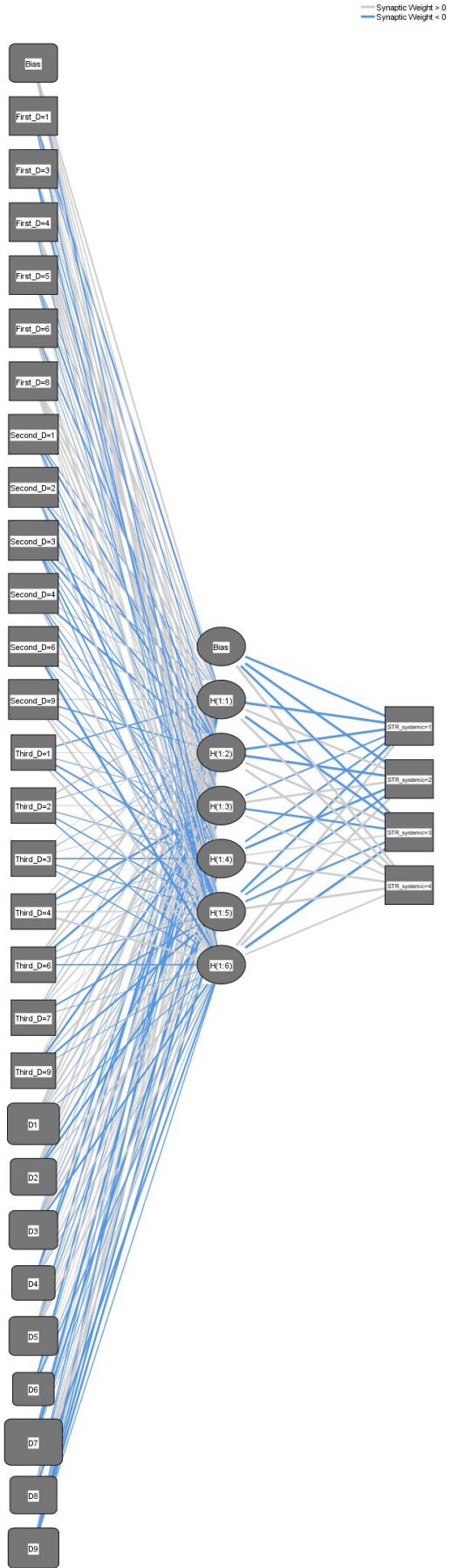
		N	Percent
Sample	Training	12	92.3%
	Testing	1	7.7%
Valid		13	100.0%
Excluded		91	
Total		104	

Network Information

Input Layer	Factors		
		1	First discourse in text
		2	Second discourse in text
		3	Third discourse in text
	Covariates	1	CONTACT RESTRICTION
		2	SANITATION AND HYGIENE
		3	ISOLATION OF INFECTED
		4	TOTAL ISOLATION
		5	HEALTH CARE
		6	VIRUS DISSEMINATION
		7	LIFESTYLE CHANGES
		8	RIGHTS AND FREEDOMS INFRINGEMENT

	9	BUREAUCRATIC RESPONSE
	Number of Units ^a	28
	Rescaling Method for Covariates	Standardized
Hidden Layer(s)	Number of Hidden Layers	1
	Number of Units in Hidden Layer 1 ^a	6
	Activation Function	Hyperbolic tangent
Output Layer	Dependent Variables	1
		Systemic strategy
	Number of Units	4
	Activation Function	Softmax
	Error Function	Cross-entropy

a. Excluding the bias unit



Hidden layer activation function: Hyperbolic tangent
 Output layer activation function: Softmax

Model Summary

Training	Cross Entropy Error	.193
	Percent Incorrect Predictions	0.0%
	Stopping Rule Used	1 consecutive step(s) with no decrease in error ^a
	Training Time	0:00:00.01
Testing	Cross Entropy Error	.129
	Percent Incorrect Predictions	0.0%

Dependent Variable: Systemic strategy

a. Error computations are based on the testing sample.

Parameter Estimates

Predictor	Hidden Layer 1						Predicted	Output Layer			
	H(1:1)	H(1:2)	H(1:3)	H(1:4)	H(1:5)	H(1:6)	[STR_system ic=1]	[STR_system ic=2]	[STR_system ic=3]	[STR_system c=4]	
Input Layer											
(Bias)	.491	.306	.239	.466	-.307	.316					
[First_D=1]	-.501	-.223	.038	.165	.552	-.225					
[First_D=3]	.276	.321	-.227	.160	-.375	-.030					
[First_D=4]	.458	1.054	.495	.536	.387	-.203					
[First_D=5]	-.088	.382	-.491	.274	-.154	.109					
[First_D=6]	.111	-.460	.395	-.079	.034	.865					
[First_D=8]	.500	.505	.565	.357	.331	.220					
[Second_D=1]	-.146	-.546	.048	-.237	-.058	-.008					
[Second_D=2]	.688	-.565	.109	.063	-.689	.564					
[Second_D=3]	-.190	-.633	-.187	-.142	-.440	-.199					
[Second_D=4]	.297	-.554	.129	-.203	-.415	.588					
[Second_D=6]	.142	.254	-.126	.095	-.133	-1.197					
[Second_D=9]	.245	-.358	.251	-.409	.268	.762					
[Third_D=1]	-.366	.034	-.065	-.527	-.418	.542					
[Third_D=2]	.506	-.051	.111	-.158	-.302	-.291					
[Third_D=3]	.009	-.043	.145	-.348	-.205	-.223					
[Third_D=4]	.250	.669	-.843	-.011	.266	.767					
[Third_D=6]	.657	.492	-.771	-.033	-.164	-.355					
[Third_D=7]	-.044	.506	.357	.057	-.488	-.041					

[Third_D=9]	.062	.610	-.760	.505	-.641	-.089				
D1	1.174	.277	.981	-.046	.328	-.180				
D2	.819	.428	.513	-.429	-.637	.493				
D3	-.001	.327	-.069	.761	.644	-.563				
D4	-.396	-.686	.028	.084	.495	-.053				
D5	-.403	.517	-.186	.348	.234	.530				
D6	-.560	-.149	.059	.028	-.062	-.298				
D7	.100	-1.562	.179	-.729	-.093	-.025				
D8	-.249	-.123	.171	.829	.541	-.513				
D9	-1.081	.453	-.448	-.712	-.757	-.186				
Hidden Layer 1 (Bias)							-1.060	-1.517	-1.126	2.281
H(1:1)							-1.621	.878	-1.427	1.581
H(1:2)							-1.325	-2.437	1.245	1.465
H(1:3)							-.437	.829	-.722	.457
H(1:4)							-.548	-1.153	.262	.858
H(1:5)							-.958	-.615	-.615	1.397
H(1:6)							1.324	1.195	-1.950	.513

Classification

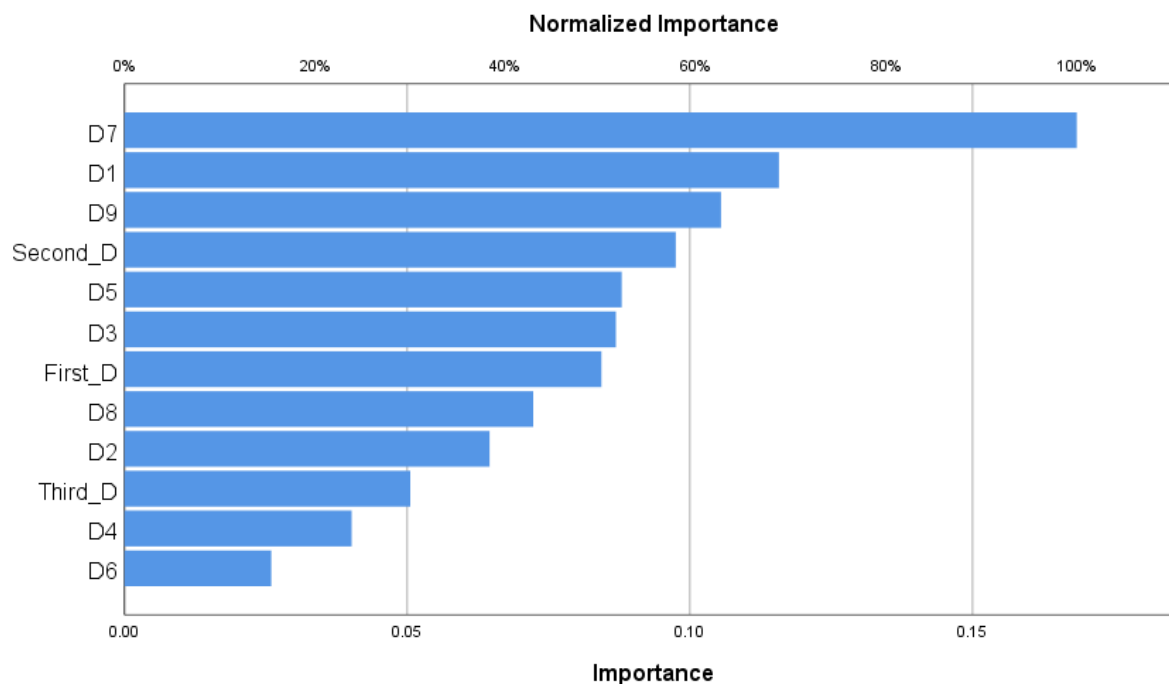
Sample	Observed	worst option	Predicted			Percent Correct
			mediocre option	good option	best option	
Training	worst option	1	0	0	0	100.0%
	mediocre option	0	1	0	0	100.0%
	good option	0	0	2	0	100.0%
	best option	0	0	0	8	100.0%
	Overall Percent	8.3%	8.3%	16.7%	66.7%	100.0%
Testing	worst option	0	0	0	0	0.0%
	mediocre option	0	1	0	0	100.0%
	good option	0	0	0	0	0.0%
	best option	0	0	0	0	0.0%
	Overall Percent	0.0%	100.0%	0.0%	0.0%	100.0%

Dependent Variable: Systemic strategy

Independent Variable Importance

	Importance	Normalized Importance
First discourse in text	.084	50.1%

Second discourse in text	.098	57.9%
Third discourse in text	.051	30.0%
CONTACT RESTRICTION	.116	68.7%
SANITATION AND HYGIENE	.065	38.3%
ISOLATION OF INFECTED	.087	51.6%
TOTAL ISOLATION	.040	23.9%
HEALTH CARE	.088	52.2%
VIRUS DISSEMINATION	.026	15.4%
LIFESTYLE CHANGES	.168	100.0%
RIGHTS AND FREEDOMS INFRINGEMENT	.072	42.9%
BUREAUCRATIC RESPONSE	.105	62.6%



```

*Multilayer Perceptron Network.
MLP STR_systemic (MLEVEL=0) BY First_D Second_D Third_D WITH D1 D2 D3 D4 D5 D6
D7 D8 D9
/RESCALE COVARIATE=STANDARDIZED
/PARTITION TRAINING=7 TESTING=3 HOLDOUT=0
/ARCHITECTURE AUTOMATIC=YES (MINUNITS=1 MAXUNITS=50)
/CRITERIA TRAINING=BATCH OPTIMIZATION=SCALEDCONJUGATE
LAMBDAINITIAL=0.000005
SIGMAINITIAL=0.00005 INTERVALCENTER=0 INTERVALOFFSET=0.5 MEMSIZE=1000
/PRINT CPS NETWORKINFO SUMMARY CLASSIFICATION SOLUTION IMPORTANCE
/PLOT NETWORK
/STOPPINGRULES ERRORSTEPS= 1 (DATA=AUTO) TRAININGTIMER=ON (MAXTIME=15)

```

```

MAXEPOCHS=AUTO
  ERRORCHANGE=1.0E-4  ERRORRATIO=0.001
/MISSING USERMISSING=EXCLUDE .

```

Multilayer Perceptron

Notes

Output Created		13-DEC-2020 17:09:12
Comments		
Input	Data	C:\Users\vitart0\OneDrive\Documents\MyDocs\Science\Quarantine definition survey\SPSS\NN_EN_covid_nominal_9D.sav
	Active Dataset	DataSet1
	Filter	<none>
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	104
Missing Value Handling	Definition of Missing	User- and system-missing values are treated as missing.
	Cases Used	Statistics are based on cases with valid data for all variables used by the procedure.
Weight Handling		not applicable

Syntax

```
MLP STR_systemic
(MLEVEL=0) BY First_D
Second_D Third_D WITH D1
D2 D3 D4 D5 D6 D7 D8 D9
/RESCALE
COVARIATE=STANDARDIZ
ED
/PARTITION
TRAINING=7 TESTING=3
HOLDOUT=0
/ARCHITECTURE
AUTOMATIC=YES
(MINUNITS=1
MAXUNITS=50)
/CRITERIA
TRAINING=BATCH
OPTIMIZATION=SCALED
ONJUGATE
LAMBDAINITIAL=0.0000005
SIGMAINITIAL=0.00005
INTERVALCENTER=0
INTERVALOFFSET=0.5
MEMSIZE=1000
/PRINT CPS
NETWORKINFO SUMMARY
CLASSIFICATION
SOLUTION IMPORTANCE
/PLOT NETWORK
/STOPPINGRULES
ERRORSTEPS= 1
(DATA=AUTO)
TRAININGTIMER=ON
(MAXTIME=15)
MAXEPOCHS=AUTO

ERRORCHANGE=1.0E-4
ERRORRATIO=0.001
/MISSING
USERMISSING=EXCLUDE .
```

Resources	Processor Time	00:00:00.39
	Elapsed Time	00:00:00.42

Warnings

One or more cases in the testing or holdout sample have factor or dependent variable values that do not occur in the training sample.

These cases are excluded from the analysis.

Case Processing Summary

		N	Percent
Sample	Training	8	88.9%
	Testing	1	11.1%
Valid		9	100.0%
Excluded		95	
Total		104	

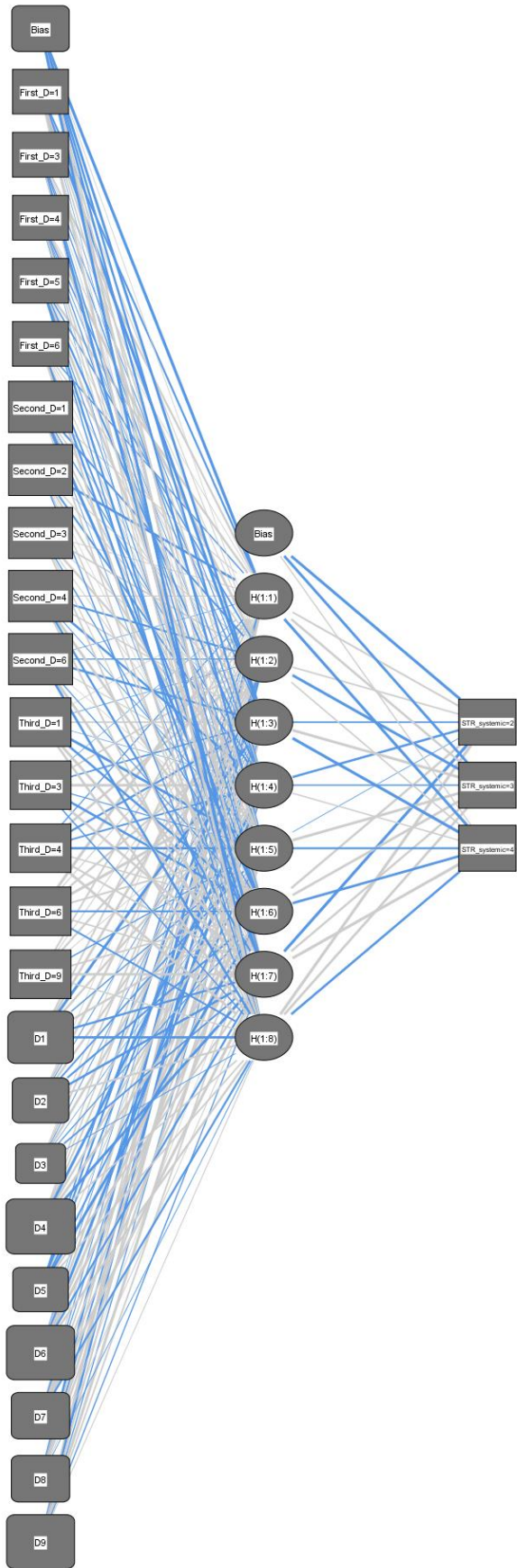
Network Information

Input Layer	Factors		
		1	First discourse in text
		2	Second discourse in text
		3	Third discourse in text
	Covariates	1	CONTACT RESTRICTION
		2	SANITATION AND HYGIENE
		3	ISOLATION OF INFECTED
		4	TOTAL ISOLATION
		5	HEALTH CARE
		6	VIRUS DISSEMINATION
		7	LIFESTYLE CHANGES
		8	RIGHTS AND FREEDOMS INFRINGEMENT

	9	BUREAUCRATIC RESPONSE
	Number of Units ^a	24
	Rescaling Method for Covariates	Standardized
Hidden Layer(s)	Number of Hidden Layers	1
	Number of Units in Hidden Layer 1 ^a	8
	Activation Function	Hyperbolic tangent
Output Layer	Dependent Variables	1
		Systemic strategy
	Number of Units	3
	Activation Function	Softmax
	Error Function	Cross-entropy

a. Excluding the bias unit

— Synaptic Weight > 0
— Synaptic Weight < 0



Hidden layer activation function: Hyperbolic tangent
Output layer activation function: Softmax

Model Summary

Training	Cross Entropy Error	.219
	Percent Incorrect Predictions	0.0%
	Stopping Rule Used	1 consecutive step(s) with no decrease in error ^a
	Training Time	0:00:00.00
Testing	Cross Entropy Error	.257
	Percent Incorrect Predictions	0.0%

Dependent Variable: Systemic strategy

a. Error computations are based on the testing sample.

Parameter Estimates

Predictor	Hidden Layer 1								Output Layer		
	H(1:1)	H(1:2)	H(1:3)	H(1:4)	H(1:5)	H(1:6)	H(1:7)	H(1:8)	[STR_syste mic=2]	[STR_syste mic=3]	[STR_syste mic=4]
Input Layer											
(Bias)	-.959	.038	-.613	-.426	-.480	.288	.558	-.708			
[First_D=1]	-.353	.085	-.899	.268	.261	-.001	.040	.654			
[First_D=3]	.383	.058	-.093	-.213	.018	-.238	-.719	.152			
[First_D=4]	.030	.623	-.256	-.047	-.214	.298	.165	-.007			
[First_D=5]	.474	-.270	.053	-.378	.559	-.131	-.461	-.228			
[First_D=6]	-.240	.225	.086	.012	.110	-.321	-.422	.484			
[Second_D=1]	.096	-.350	.152	-.207	.308	-.777	-.041	.280			
]											
[Second_D=2]	-.606	.131	.223	-.340	.373	.010	.231	-.222			
]											
[Second_D=3]	.081	.304	.139	.450	.071	-.221	.148	.316			
]											
[Second_D=4]	.120	-.395	.257	-.482	-.084	.649	-.421	.333			
]											
[Second_D=6]	-.030	-.140	-.493	.138	.028	-.154	.647	-.543			
]											
[Third_D=1]	.045	-.040	.277	-.007	-.658	-.493	.685	.509			
[Third_D=3]	-.013	.300	-.299	.763	-.137	-.496	.611	-.253			
[Third_D=4]	-.195	.530	-.404	-.320	-.570	.261	.359	.653			

[Third_D=6]	.919	.113	.417	.779	.344	-.348	.265	-.345			
[Third_D=9]	.335	.077	.410	.055	-.214	.344	.634	.249			
D1	.319	.607	-.850	.474	-.230	.478	-.441	-.603			
D2	.047	.506	-.072	.452	-.304	-.371	-.516	.374			
D3	.055	.318	-.061	.546	-.017	-.183	-.313	-.059			
D4	.255	.234	.346	-.705	.424	.576	-.718	.298			
D5	-.258	-.377	-.331	.109	-.324	-.697	.370	.300			
D6	-.005	-.051	.440	-.710	.665	.935	-.403	.464			
D7	.082	-.098	-.121	.277	.370	.326	.762	-.384			
D8	-.642	.259	-.294	.701	.403	.021	.066	-.057			
D9	.610	-.544	.359	-.155	.825	.299	-.214	.090			
Hidden Layer	(Bias)								-.838	-.675	.213
1	H(1:1)								.343	.507	-.819
	H(1:2)								.294	-.730	.264
	H(1:3)								-.263	.685	-.981
	H(1:4)								-.491	-.245	.244
	H(1:5)								-.044	.704	-.371
	H(1:6)								.492	.632	-.611
	H(1:7)								-1.117	.473	1.301
	H(1:8)								1.174	.608	-.555

Classification

Sample	Observed	Predicted			Percent Correct
		mediocre option	good option	best option	
Training	mediocre option	1	0	0	100.0%
	good option	0	1	0	100.0%
	best option	0	0	6	100.0%
	Overall Percent	12.5%	12.5%	75.0%	100.0%
Testing	mediocre option	0	0	0	0.0%
	good option	0	1	0	100.0%
	best option	0	0	0	0.0%
	Overall Percent	0.0%	100.0%	0.0%	100.0%

Dependent Variable: Systemic strategy

Independent Variable Importance

	Importance	Normalized Importance
First discourse in text	.056	43.3%

Second discourse in text	.101	78.5%
Third discourse in text	.083	64.5%
CONTACT RESTRICTION	.110	84.9%
SANITATION AND HYGIENE	.059	45.8%
ISOLATION OF INFECTED	.022	16.9%
TOTAL ISOLATION	.129	100.0%
HEALTH CARE	.053	41.2%
VIRUS DISSEMINATION	.124	95.7%
LIFESTYLE CHANGES	.069	53.4%
RIGHTS AND FREEDOMS INFRINGEMENT	.070	53.9%
BUREAUCRATIC RESPONSE	.123	95.2%

